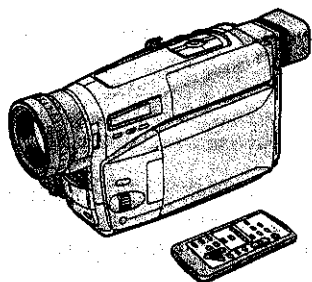


Panasonic

Model No.

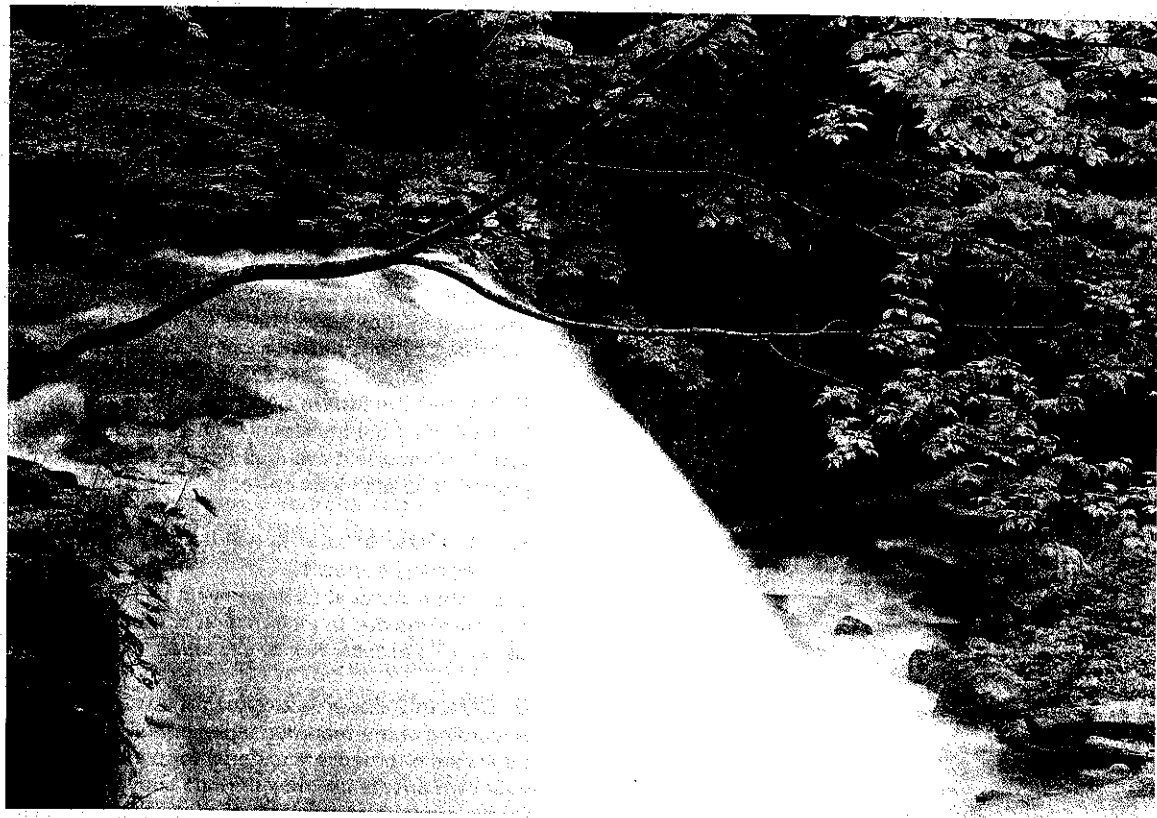
NV-VS50EN/A

NV-VS70EN/A



S-VHS-C 攝錄影機
S-VHS-C Movie Camera

使用説明書
Operating Instructions
Инструкция по эксплуатации
إرشادات التشغيل



S VHS C VHS
PAL
625

S-VHS ET

使用前，請詳細閱讀本說明書。

Before use, please read these instructions completely.

Перед использованием прочитайте, пожалуйста, эту инструкцию полностью.

قبل الاستخدام، الرجاء قراءة هذه الإرشادات بالكامل.

VQT9094

您的安全信息

警告

為了減少火災或觸電危險，以及討厭的干擾，請只使用推薦的附件並勿讓該設備淋雨或受潮。
勿拆卸外殼(或後板)，內部沒有用戶可以維修的部件，請將維修工作委託給專業維修人員。

攝錄影機

額定銘牌位於攝錄影機的底側。

交流轉接器

額定銘牌位於交流轉接器的底側。

由於該設備在使用中會變熱，所以，請在通風良好之處進行操作。且勿將該設備置於書櫃或類似之物品的封閉空間內。

- 仔細閱讀使用說明書，並正確地使用攝錄影機。
如果未遵守本使用說明書所介紹的操作步驟進行操作，則由此產生的傷害或部件損害將純屬用戶的責任。

本使用說明書用於兩種攝錄影機型號：NV-VS50和NV-VS70。
請注意，您的攝錄影機上的控制和組件等可能會與本使用說明書中的圖形表示稍有不同。

■ 試拍攝錄影機。

在您首次拍攝重要的活動之前，應試拍攝錄影機，以確認其拍攝和功能是否正常。

■ 製造商將不負責賠償拍攝內容的丟失。

對於因該攝錄影機、其附件或錄影帶發生故障或缺陷而造成的拍攝失敗，製造商將不負責任何賠償。

■ 請注意遵守版權法。

對原版錄影帶、雷射碟或其它出版或廣播節目進行私用目的以外的錄影時，可能會違反版權法。即使對於私用目的，某些節目的錄影也可能是受到禁止的。

Information for Your Safety

WARNING

To reduce the risk of fire or shock hazard and annoying interference, use only the recommended accessories and do not expose this equipment to rain or moisture.

Do not remove the cover (or back); there are no user serviceable parts inside. Refer servicing to qualified service personnel.

Movie Camera

The rating plate is on the underside of the Movie Camera.

AC Adaptor

The rating plate is on the underside of the AC Adaptor.

As this equipment gets hot during use, operate it in a well ventilated place; do not install this equipment in a confined space such as a bookcase or similar unit.

- Carefully read the Operating Instructions and use the Movie Camera correctly.
Injury or material damage resulting from any kind of use that is not in accordance with the operating procedures explained in these Operating Instructions are the sole responsibility of the user.

These Operating Instructions are for the two Movie Camera models NV-VS50 and NV-VS70. Please note that the actual controls and components, etc. of your Movie Camera may look somewhat different from those shown in the illustrations in these Operating Instructions.

■ Try out the Movie Camera.

Be sure to try out the Movie Camera before recording your first important event and check that it records properly and functions correctly.

■ The manufacturer is not liable for loss of recorded contents.

The manufacturer shall in no event be liable for the loss of recordings due to malfunction or defect of this Movie Camera, its accessories or cassettes.

■ Carefully observe copyright laws.

Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

目錄

如果您想馬上使用攝錄影機，至少須閱讀帶▲標識的頁號。

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If you want to start using the Movie Camera immediately, be sure to read at least the pages marked with ▲.

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注意事項、技術信息等

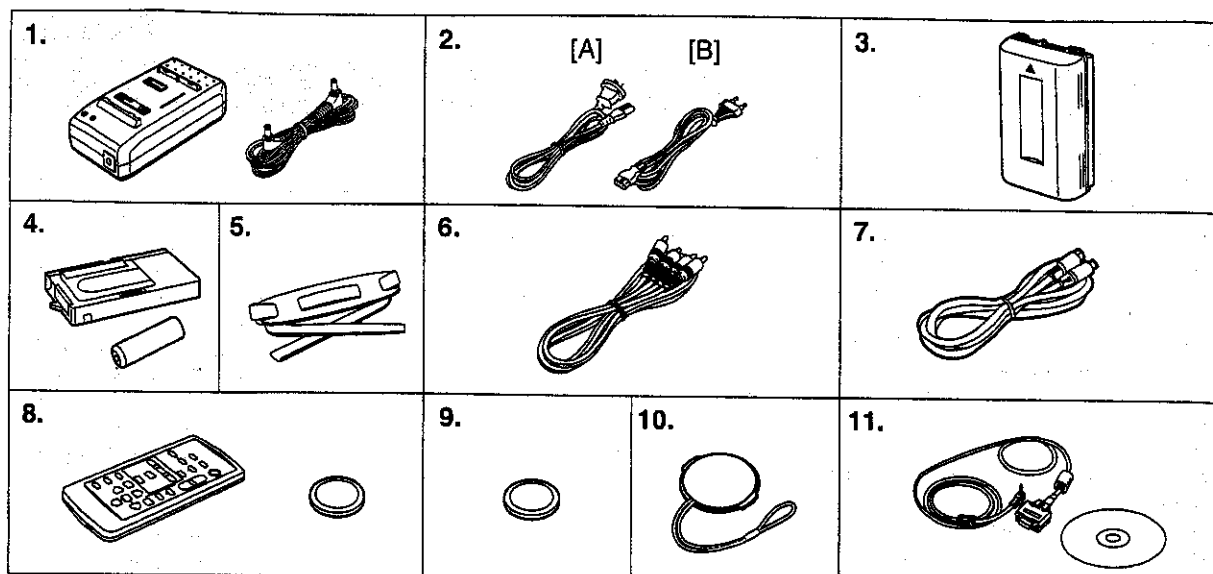
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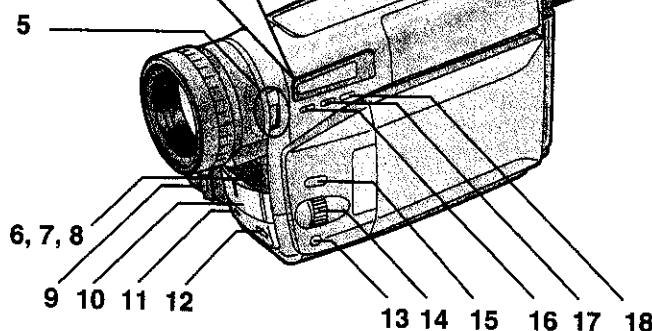
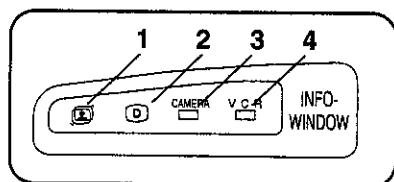
標準附件

1. 交流轉接器 (→ 18·20·164)
給攝錄影機供電或對電池充電。
直流輸入纜線 (→ 18)
將交流轉接器連接至攝錄影機。
2. 交流電源纜線 (→ 18·20)
將交流轉接器連接至交流電源插座。
[A] 澳大利亞和新西蘭
[B] 除澳大利亞和新西蘭之外的地區
3. 電池 (→ 20·166)
給攝錄影機供電。
4. 磁帶轉接器和電池 (→ 66)
5. 肩用背帶 (→ 16)
6. 音頻 / 影像纜線 (→ 72·160·162)
用於將攝錄影機連接至電視機或錄影機的影像輸入和音頻輸入插孔。
7. S 影像纜線 (→ 72·160·162)
8. 遙控器和鈕扣式電池 (→ 116·122)
9. 鈕扣式電池 (→ 48)
為攝錄影機內藏的時鐘供電。
10. 鏡頭蓋 (→ 46)
11. 微電腦連接套件 (→ 162)

ENGLISH

Standard Accessories

1. AC Adaptor (→ 18, 20, 164)
To supply power to the Movie Camera and to charge the Battery.
DC Input Lead (→ 18)
To connect the AC Adaptor to the Movie Camera.
2. AC Mains Lead (→ 18, 20)
To connect the AC Adaptor to an AC mains socket.
[A] Australia and New Zealand
[B] Areas other than Australia and New Zealand
3. Battery (→ 20, 166)
To supply power to the Movie Camera.
4. Cassette Adaptor and Battery (→ 66)
5. Shoulder Strap (→ 16)
6. AV Cable (→ 72, 160, 162)
To connect the Movie Camera to the video input and audio input sockets on a TV or a VCR.
7. S-Video Cable (→ 72, 160, 162)
8. Remote Controller and Button-Type Battery (→ 116, 122)
9. Button-Type Battery (→ 48)
To supply power to the Movie Camera's built-in clock.
10. Lens Cap (→ 46)
11. Personal Computer Connection Kit (→ 162)



中文

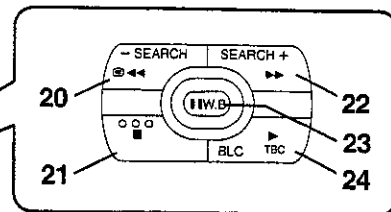
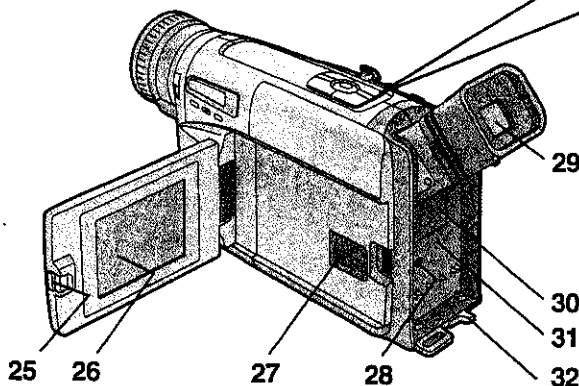
控制和組件

- 1 超級畫面穩定指示燈 [] (→ 78·86)
- 2 數位效果指示燈 [] (→ 78·138)
- 3 攝錄影機狀態燈 [CAMERA] (→ 54)
- 4 放影機狀態燈 [VCR] (→ 62)
- 5 0-Lux 拍攝開關 [0 LUX OFF/ON] (→ 104)
- 6 白色平衡感應器 (→ 170)
- 7 遙控感應器 (→ 120)
- 8 內藏紅外線光束發射器 (→ 104)
- 9 鏡頭蓋夾 (→ 46)
- 10 麥克風
- 11 信號燈 (→ 56)
- 12 淡化鈕 [FADE] (→ 74·98·148)
- 13 聚焦鈕 [FOCUS] (→ 110)
項目設定鈕 [SET] (→ 28)
軌跡調整鈕 (→ 68)
- 14 多功能環 [▼/MF/TRACKING] (→ 28·68·110)
- 15 菜單鈕 [MENU] (→ 28)
- 16 自動曝光選擇鈕 [PROG. AE] (→ 54·106·110·112)
- 17 數位影像存儲鈕 [STORE] (→ 132·150)
數位影像重疊鈕 [OFF/ON] (→ 132·150)
- 18 數位淡化/數位影像色彩選擇鈕 [COLOUR]
(→ 98·132·148·150)
- 19 鏡頭蓋

ENGLISH

Controls and Components

- 1 Super Image Stabilizer Indication Lamp [] (→ 78, 86)
- 2 Digital Effect Indication Lamp [] (→ 78, 138)
- 3 Camera Mode Lamp [CAMERA] (→ 54)
- 4 VCR Mode Lamp [VCR] (→ 62)
- 5 0-Lux Recording Switch [0 LUX OFF/ON] (→ 104)
- 6 White Balance Sensor (→ 170)
- 7 Remote Control Sensor (→ 120)
- 8 Built-in Infra-red Beam Emitters (→ 104)
- 9 Lens Cap Holder (→ 46)
- 10 Microphone
- 11 Tally Lamp (→ 56)
- 12 Fade Button [FADE] (→ 74, 98, 148)
- 13 Focus Button [FOCUS] (→ 110)
Item Set Button [SET] (→ 28)
Tracking Button (→ 68)
- 14 Multi-Function Dial [▼/MF/TRACKING] (→ 28, 68, 110)
- 15 Menu Button [MENU] (→ 28)
- 16 Auto Exposure Selector Button [PROG. AE] (→ 54, 106, 110, 112)
- 17 Digital Image Store Button [STORE] (→ 132, 150)
Digital Image Superimposer Button [OFF/ON] (→ 132, 150)
- 18 Colour Selector Button for Digital Fade/Digital Image [COLOUR] (→ 98, 132, 148, 150)
- 19 Eyecup



中文

- 20 反向尋影鈕[**-SEARCH**](→ 58)
倒帶 / 倒帶尋影 / 高速倒帶鈕[**◀◀**](→ 62·68·70)
錄影檢查鈕[**Ⓢ**](→ 58)
- 21 停止鈕[**■**](→ 62)
- 22 正向尋影鈕[**SEARCH+**](→ 58)
快進 / 快進尋影鈕[**▶▶**](→ 70)
- 23 白色平衡鈕[W.B](→ 106)
暫停鈕[**⏸**](→ 70)
- 24 放影鈕[**▶**](→ 62)
逆光鈕[BLC](→ 58)
時基校正器鈕[TBC](→ 64)
- 25 液晶顯示監視器打開桿[**▲OPEN**](→ 26)
- 26 液晶顯示監視器 (→ 26·38·72)

由於液晶製造技術的限制，在液晶顯示監視器屏幕上可能會有一些細小的亮點或黑點。然而，這並非故障，也不會影響所攝畫面的質量。

- 27 錄影帶室鎖定鈕[**LOCK**](→ 40)
- 28 直流輸入插孔[DC IN](→ 18)
- 29 電子尋像器 (→ 46·72)

由於液晶製造技術的限制，在電子尋像器屏幕上可能會有一些細小的亮點或黑點，整個屏幕可能會有輕微的色光，或出現顫動現象。然而，這並非故障，也不會影響所攝畫面的質量。

- 30 鈕扣式電池的電池室蓋[**BACKUP BATTERY**](→ 48)
- 31 電池室蓋 (→ 20)
- 32 電池排出桿[**◀ BATTERY EJECT**](→ 20)

ENGLISH

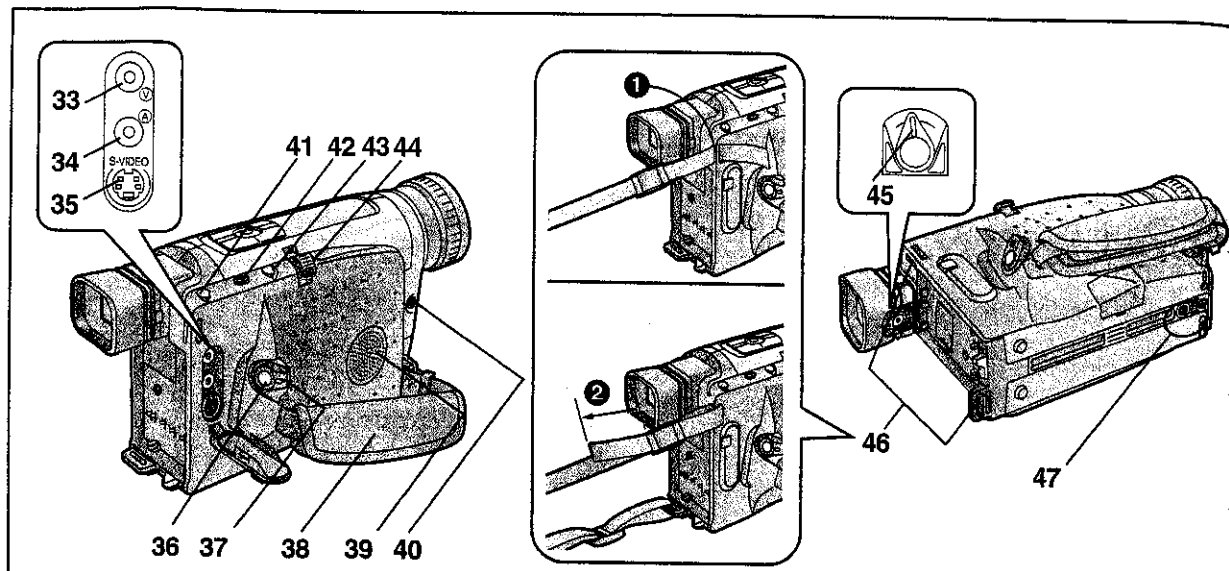
- 20 Reverse Search Button [**-SEARCH**] (→ 58)
Rewind/Review/High-Speed Rewind Button [**◀◀**]
(→ 62, 68, 70)
Recording Check Button [**Ⓢ**] (→ 58)
- 21 Stop Button [**■**] (→ 62)
- 22 Forward Search Button [**SEARCH+**] (→ 58)
Fast Forward/Cue Button [**▶▶**] (→ 70)
- 23 White Balance Button [W.B] (→ 106)
Pause Button [**⏸**] (→ 70)
- 24 Playback Button [**▶**] (→ 62)
Backlight Button [BLC] (→ 58)
TBC Button [TBC] (→ 64)
- 25 LCD Monitor Open Lever [**▲OPEN**] (→ 26)
- 26 LCD Monitor (→ 26, 38, 72)

Due to limitations in LCD production technology, there may be some tiny bright or dark spots on the LCD Monitor screen. However, this is not a malfunction and does not affect the recorded picture.

- 27 Cassette Compartment Lock Button [LOCK] (→ 40)
- 28 DC Input Socket [DC IN] (→ 18)
- 29 Finder (→ 46, 72)

Due to limitations in LCD production technology, there may be some tiny bright or dark spots on the Finder screen, the whole screen may have a slight colour cast, and flickering may occur. However, this is not a malfunction and does not affect the recorded picture.

- 30 Cover of the Button-type Battery's Compartment [BACKUP BATTERY] (→ 48)
- 31 Battery Holder (→ 20)
- 32 Battery Eject Lever [**◀BATTERY EJECT**] (→ 20)

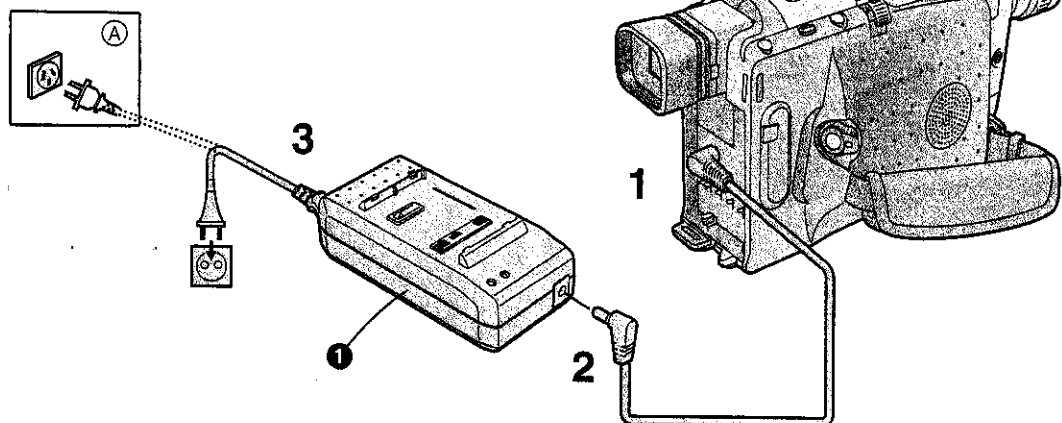


中文

- 33 影像輸出插孔 [V] (→ 72, 160, 162)
- 34 音頻輸出插孔 [A] (→ 72, 160, 162)
- 35 S 影像輸出插孔 [S-VIDEO] (→ 72, 160, 162)
- 36 拍攝開始/停止鈕 (→ 54)
- 37 關閉/打開狀態選擇開關 [CAMERA/OFF/VCR] (→ 46, 54, 62, 72)
- 38 扣抓皮帶 (→ 46)
- 39 揚聲器 (→ 62)
- 40 數位靜畫端子 [DIGITAL STILL PICTURE] (→ 162)
- 41 錄影帶排出鈕 [EJECT] (→ 40)
- 42 日期/時間/題名鈕 [DATE/TITLE] (→ 52, 130, 136)
- 43 拍攝開始/停止鈕 [REC] (→ 54, 56)
多畫面/畫中畫鈕 [MULTI] (→ 90, 92, 94, 140, 142, 144)
抓拍錄影鈕 [SNAP] (→ 76)
- 44 變焦桿 [W/T] (→ 60, 88)
音量調節桿 [-VOL+] (→ 62)
- 45 目鏡校正控制桿 (→ 46)
- 46 肩用背帶環
將肩用背帶一端穿過肩用背帶環 ①。
將肩用背帶的末端反折起來，然後將其穿過肩用背帶長度調節器。
將背帶的末端拉出肩用背帶長度調節器之外約 2 釐米 ②，使其不易滑脫。
- 47 三角架連接孔

ENGLISH

- 33 Video Output Socket [V] (→ 72, 160, 162)
- 34 Audio Output Socket [A] (→ 72, 160, 162)
- 35 S-Video Output Socket [S-VIDEO] (→ 72, 160, 162)
- 36 Recording Start/Stop Button (→ 54)
- 37 Off/On Mode Selector Switch [CAMERA/OFF/VCR] (→ 46, 54, 62, 72)
- 38 Grip Belt (→ 46)
- 39 Speaker (→ 62)
- 40 Digital Still Picture Terminal [DIGITAL STILL PICTURE] (→ 162)
- 41 Cassette Eject Button [EJECT] (→ 40)
- 42 Date/Time/Title Button [DATE/TITLE] (→ 52, 130, 136)
- 43 Recording Start/Stop Button [REC] (→ 54, 56)
Multi Image/Picture-in-Picture Button [MULTI] (→ 90, 92, 94, 140, 142, 144)
Snapshot Recording Button [SNAP] (→ 76)
- 44 Zoom Lever [W/T] (→ 60, 88)
Volume Adjustment Lever [-VOL+] (→ 62)
- 45 Eyepiece Corrector Lever (→ 46)
- 46 Shoulder Strap Holders
Pull one end of the Shoulder Strap through the Shoulder Strap Holder ①.
Fold the end of the Shoulder Strap back, pull it through the Shoulder Strap Length Adjuster.
Pull it out more than 2 cm ② from the Shoulder Strap Length Adjuster so that it cannot slip off.
- 47 Tripod Receptacle



中文

三種電源

- 1) 交流轉接器 ① (附件) 由交流電源插座供電
- 2) 汽車電池充電器 (選購品) 由汽車上的點火器插座供電
- 3) 電池 (附件) (→ 20)

由交流電源插座供電

- 1 將直流輸入纜線連接至攝錄影機上的[DC IN]插孔。
- 2 將該纜線的另一頭連接至交流轉接器的[DC OUT]插孔。
- 3 將交流電源纜線連接至交流轉接器和交流電源插座。
 (A): 澳大利亞和新西蘭

- 將直流輸入纜線連接至攝錄影機之前，必須將[CAMERA/OFF/VCR]開關設置在[OFF]。
- 由於交流轉接器具備自動通用電壓調節功能(交流100-240V·50/60Hz)，所以在其它國家使用時也無需作任何手動電壓調整。

ENGLISH

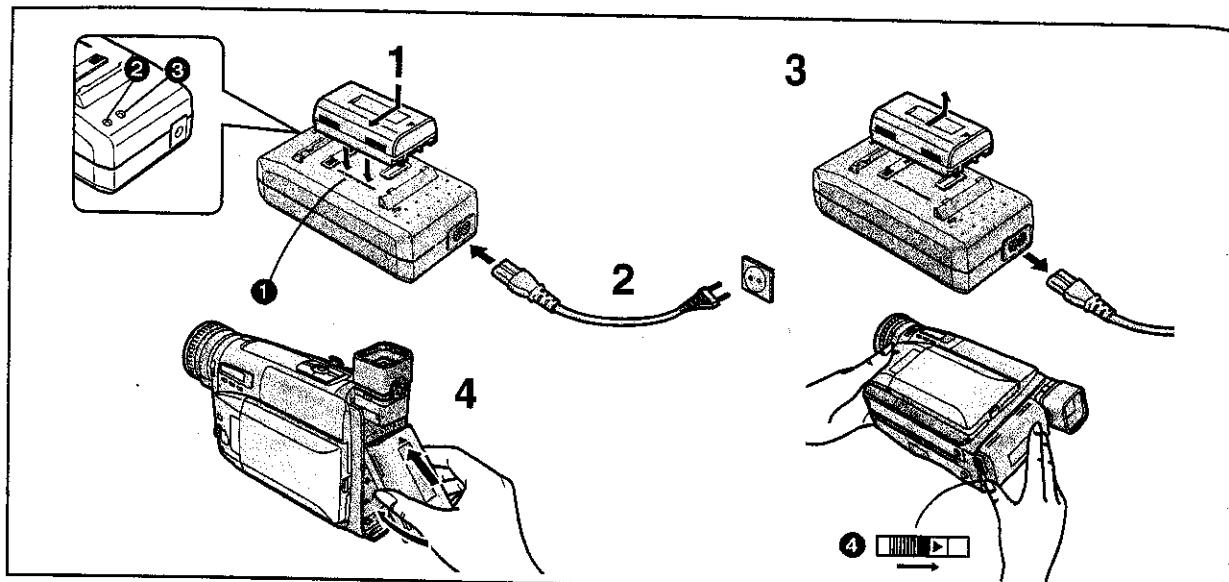
The 3 Types of Power Supply

- 1) AC Adaptor ① (supplied) to supply power from an AC mains socket
- 2) Car Battery Charger (optional) to supply power from the cigarette lighter socket in a vehicle
- 3) Battery (supplied) (→ 20)

Supplying Power from an AC Mains Socket

- 1 Connect the DC Input Lead to the [DC IN] Socket on the Movie Camera.
- 2 Connect the other end of the cable to the [DC OUT] Socket on the AC Adaptor.
- 3 Connect the AC Mains Lead to the AC Adaptor and to an AC mains socket.
 (A): Australia and New Zealand

- Before connecting the DC Input Lead to the Movie Camera, be sure to set the [CAMERA/OFF/VCR] Switch to [OFF].
- The AC Adaptor features automatic universal voltage adjustment (AC 100-240 V, 50/60 Hz), therefore, there is no need for any manual voltage adjustment for use in other countries.



中文

由電池供電

在使用電池前請先將其充電。

1 裝上電池。

- 將電池對準線①，然後將電池朝箭頭所示方向，一邊按一邊滑動。
- 在充電時，請不要直流輸入纜線與交流轉接器連接。

2 將交流電源纜線連接至交流轉接器和交流電源插座。

- [POWER] (電源) 燈②和[CHARGE] (充電) 燈③將亮起，並開始充電。(用於NV-VS50)
[POWER] 燈②亮起，接著[CHARGE] 燈③也開始閃亮，開始充電。(用於NV-VS70)
- 如果即使已安裝了電池，[CHARGE] 燈③也不點亮，這時請取下電池，再從頭安裝一次。

3 依上述步驟1的相反方向，滑動電池，將其取出。

4 將電池的頂部插入錄影帶電池室蓋的頂部(這樣箭頭將朝上)，並將其底部按入攝錄影機，直至咔嚓一聲到位。

從攝錄影機上取出電池時

牢靠地握住電池，以免其失落，並依箭頭方向滑動[◀ BATTERY EJECT] 桿④，同時拉出電池。

- 取出電池之前，請將[CAMERA/OFF/VCR] 開關設置在[OFF]。

■ 充電指示燈[CHARGE]

閃亮(僅限於NV-VS70): 正在充電

點亮(NV-VS50): 正在充電

點亮(NV-VS70): 電池雖未充足電，但已可使攝錄影機進行操作。

(電池已充電約30分鐘。)

熄滅: 電池已充足電。

ENGLISH

Supplying Power with the Battery

Charge the Battery before using it.

1 Attach the Battery.

- Align the Battery with line ① and push it in the direction of the arrow while holding it down.
- When charging, do not connect the DC Input Lead to the AC Adaptor.

2 Connect the AC Mains Lead to the AC Adaptor and an AC mains socket.

- The [POWER] Lamp ② and the [CHARGE] Lamp ③ light and charging starts. (for NV-VS50)
The [POWER] Lamp ② lights and then the [CHARGE] Lamp ③ flashes and charging starts. (for NV-VS70)
- If the [CHARGE] Lamp ③ does not light even though the Battery is attached, remove the Battery and then re-attach it.

3 Remove the Battery by sliding It in the opposite direction of Step 1 above.

4 Insert the Battery with its top (so that the arrow points upward) into the top Battery Holder and press the bottom of it toward the Movie Camera until it locks with a click.

Removing the Battery from the Movie Camera

Hold the Battery firmly to prevent it from dropping and pull it off while sliding the [◀ BATTERY EJECT] Lever ④ in the direction of the arrow.

- Before removing the Battery, set the [CAMERA/OFF/VCR] Switch to [OFF].




■ Charging Lamp [CHARGE]

Flashing (NV-VS70 only): During charging

Lit (NV-VS50): During charging

Lit (NV-VS70): The Battery can already be used to operate the Movie Camera but it is not yet fully charged. (Approx. 30-minute battery charge)

Off: The Battery is fully charged.

		NV-VS50	NV-VS70
CGR-V14 CGR-V14S CGR-V610 	(A)	2 h 40 min.	1 h 20 min.
	(B)	2 h 10 min. (1 h 30 min.)	2 h 10 min. (1 h 25 min.)
	(C)		50 min. (35 min.)
CGR-V26S CGR-V620 	(A)	4 h 50 min.	2 h 25 min.
	(B)	4 h 10 min. (2 h 55 min.)	4 h 10 min. (2 h 45 min.)
	(C)		50 min. (35 min.)
CGR-V53S CGR-V816 	(A)	10 h 20 min.	5 h 10 min.
	(B)	8 h 20 min. (5 h 50 min.)	8 h 20 min. (5 h 30 min.)
	(C)		50 min. (35 min.)

中文

■ 充電時間與手動拍攝方式時的最長連續拍攝時間

(A) 充電時間

(B) 最長連續拍攝時間

(C) 充電約 30 分鐘時的最長連續拍攝時間

- “1 h 10 min.” 意思為 “1 小時 10 分鐘”。
- 型號 CGR-V14 的電池為附件。
- 上表所列時間為近似值。括號內的數字表示使用液晶顯示監視器時的拍攝時間。
- 僅 NV-VS70 型號具有 30 分鐘電池充電功能。

最長連續拍攝時間指在環境溫度 25℃ 和相對濕度 60% 的條件，進行連續拍攝的時間。然而，在實際拍攝中，由於使用變焦和其它功能會增加電力的消耗，且溫度較高或較低時，會影響電池產生電力的能力。所以，每個電池的實際錄影時間，可能會比上表所列，要短約 30%—50%。

- 當第一次給已完全放電（由於存放時間過長等）的電池充電時，[POWER]燈和[CHARGE]燈都會閃爍。
- 電池充電的室內溫度應為 10℃—30℃。
- 在拍攝或充電中，電池會發熱，這是正常現象。
- 若要確保得到更精確的電池剩餘電力指示，安裝電池時，最好使用已充足電的電池。

ENGLISH

■ Charging Time and Maximum Continuous Recording Time in the Manual Recording Mode

(A) Charging Time for a Full Charge

(B) Maximum Continuous Recording Time

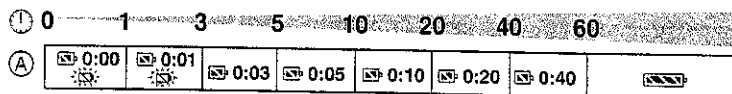
(C) Maximum Continuous Recording Time for an Approx. 30-Minute Charge

- “1 h 10 min.” stands for “1 hour and 10 minutes”.
- The Battery Model CGR-V14 is supplied.
- The times shown in the above chart are approximations. The figures in parentheses show the recording time when using the LCD Monitor.
- Only the NV-VS70 models come with 30-Minute battery Charge.

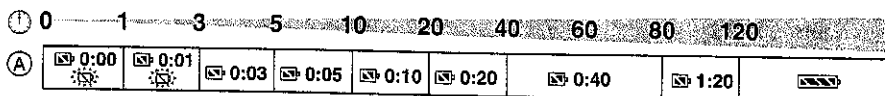
Maximum Continuous Recording Time means the duration of continuous recording performed at an ambient temperature of 25°C and 60% relative humidity. In actual recording, however, the use of the zoom and other functions increases the power consumption, and higher or lower temperatures reduce the Battery's ability to generate electricity. Therefore, the actual recording time per Battery may be approximately 30%—50% shorter than listed above.

- When first charging a Battery that is completely discharged as a result of being in storage for an extended period of time, etc., the [POWER] Lamp and the [CHARGE] Lamp both flash.
- Charge the Battery at a room temperature between 10°C and 30°C.
- During recording or charging, the Battery becomes warm. However, this is normal.
- To ensure precise indication of the remaining battery power, always use a fully charged Battery when attaching a Battery.

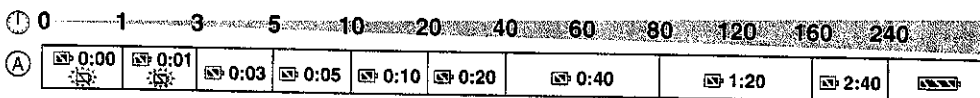
**CGR-V14
CGR-V14S
CGR-V610**



**CGR-V26S
CGR-V620**



**CGR-V53S
CGR-V816**



中文

■ 檢查電池剩餘電力

您可以通過電子尋像器和液晶顯示監視器來確認所裝電池的剩餘電力。同時您還可以知道所裝電池還能維持約多長時間的連續拍攝。所示時間並不是以實際的分鐘數來表示，而是以時間段來表示。

上表顯示了對應於實際剩餘操作時間，所示剩餘電池操作時間指示的變化。

⌚：實際的剩餘電池操作時間

Ⓐ：所指示的剩餘電池操作時間

(當在鏡面狀態下進行拍攝時，將不顯示此項指示。)

(→ 126)

剩餘電池操作時間指示

上述指示的時間數據是在環境溫度為25℃，使用充足電的電池進行連續拍攝時得到的。因此，在下述情況下，實際可能的拍攝時間會與上表所示的時間不同：

當不是連續進行拍攝時

在很多情況下，您會頻繁地開始和停止拍攝，打開和關閉攝錄影機，使用變焦和其它功能，所有這些操作都將消耗電力。所以，電池提供的實際可能拍攝時間會比上表所示的時間約少30%~50%。(→ 22)

當環境溫度極低或極高時

電池的特性依環境溫度而發生變化，在極低的溫度下，電池能提供的拍攝時間會變得非常短。另外，低溫拍攝時攝錄影機上的剩餘電池操作時間指示會降低得比環境溫度為25℃時稍快。

(在高溫時，會降低得稍慢。)

當電池已達到其使用壽命時

當給電池充足電後，普通使用時其操作時間仍然很短，這意味著電池已達到了其使用壽命。(→ 166)

ENGLISH

■ Checking the Remaining Battery Power

You can confirm the remaining charge in the attached Battery in the Finder or on the LCD Monitor. This also shows you approximately how much more continuous recording time you can get from the attached Battery. The indicated time does not change in 1-minute steps.

The above illustrations show how the Remaining Battery Operation Time Indication changes according to the remaining operation time.

⌚: Actual remaining battery operation time

Ⓐ: Remaining Battery Operation Time Indication

(This indication does not appear when recording in the Mirror Mode.) (→ 126)

Remaining Battery Operation Time Indication

This Indication shows the remaining duration of continuous recording at an ambient temperature of 25℃ when a fully charged Battery was attached. Therefore, in the following cases, the actual available recording time is different from the times shown above:

When Recording Is Not Performed Continuously

In most cases, you will frequently start and stop recording, turn the Movie Camera on and off, use the zoom and other functions, all of which consume power. Therefore, the actual available recording time from the Battery is approximately 30%~50% shorter than listed. (→ 22)

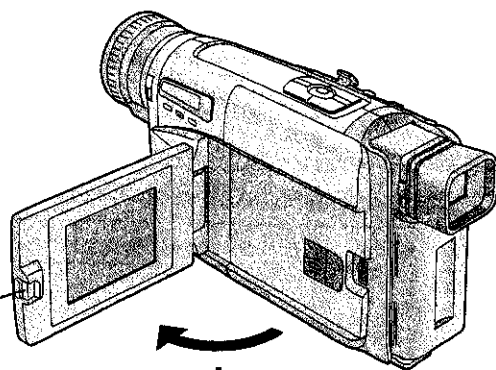
When the Ambient Temperature Is Extremely Low or Extremely High

The characteristics of the Battery vary according to the ambient temperature, and at a very low temperature, the possible recording time becomes extremely short. In addition, the Remaining Battery Operation Time Indication on the Movie Camera decreases a little faster than at an ambient temperature of 25℃.

(At a higher temperature, it tends to decrease more slowly.)

When the Service Life of the Battery Has Reached Its End

When the operation time even after full charging is too short for normal use, the service life of the Battery has reached its end. (→ 166)



中文

液晶顯示監視器的使用

改善後的液晶顯示背光透射能力使畫面額外明亮。另外，液晶顯示表面的特殊膜層可擴散外來光線，使反光降至最低，所以畫面色彩生動、清晰易看。

- 1 向左滑動[▲OPEN]桿，同時如箭頭所示，將液晶顯示監視器打開約90°。

關閉液晶顯示監視器時

將液晶顯示監視器返回攝影機本體，直至其卡嗒一聲到位。

- 液晶顯示監視器上顯示的畫面看起來在垂直方向上受到一些拉伸，然而，實際錄製的圖像並不受此影響。
- 在關閉液晶顯示監視器之前，請恢復其垂直位置，且須在關閉液晶顯示監視器之前，確認錄影帶室已牢靠地關閉。
- 打開液晶顯示監視器時，將自動關閉電子尋像器。然而，當您將液晶顯示監視器面向前方時，電子尋像器將再次打開。
- 在攝錄影機溫度特別低的情況下，將其打開時，液晶顯示監視器上的畫面會比平常暗。然而，待其到達正常溫度時，將獲得正常的亮度。
- 清除手印時，請用軟布擦拭液晶顯示監視器。
- 勿將液晶顯示監視器暴露在直射陽光之下。當陽光照射在液晶顯示監視器上時，將可能很難看清畫面。

在液晶顯示監視器的生產中採用了精度極高的技術。結果獲得了99.99%的有效像點，而只有0.01%的像點失效或總亮。然而，這並非故障，也不會影響所攝畫面的質量。

ENGLISH

Using the LCD Monitor

Improved LCD backlight transmission makes the picture extra bright. In addition, special coating of the LCD's surface diffuses the light from outside to minimize light reflection, so the picture has vivid colours and is easy to see.

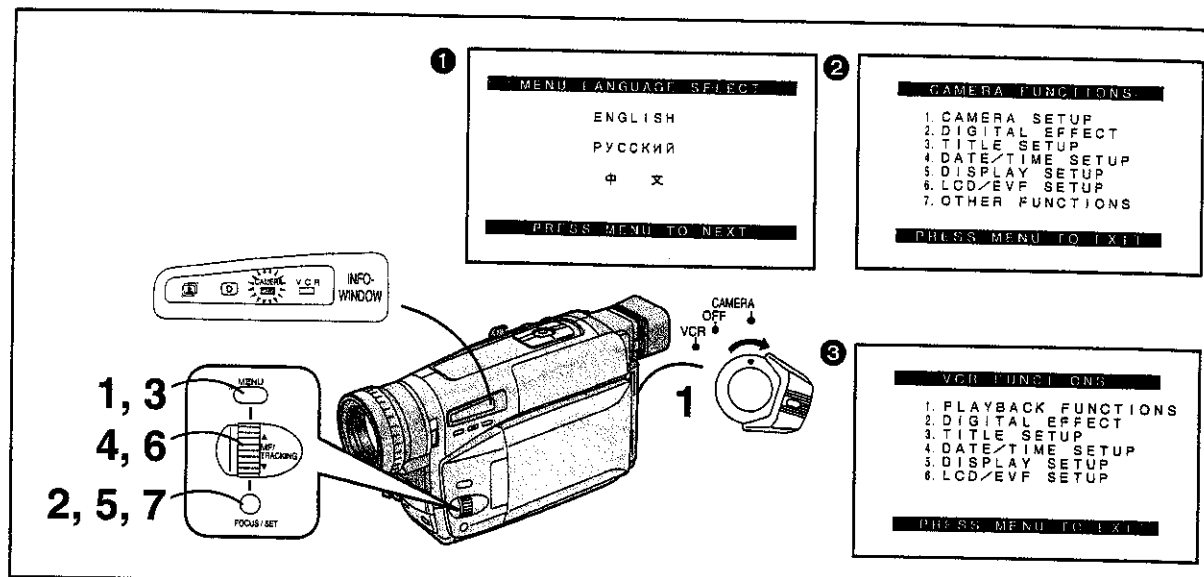
- 1 Slide the [▲OPEN] Lever to the left and simultaneously open the LCD Monitor in the direction of the arrow approximately 90°.

Closing the LCD Monitor

Turn the LCD Monitor back toward the Movie Camera body until it locks with a click.

- The picture seen on the LCD Monitor looks slightly stretched vertically, however, the actually recorded picture remains unaffected by this.
- Return the LCD Monitor to its vertical position before closing it. Also, make sure that the Cassette Compartment is securely closed before closing the LCD Monitor.
- Opening the LCD Monitor automatically turns the Finder off. However, when you turn the LCD Monitor so that it is faces forward, the Finder turns on again.
- When the Movie Camera is very cold when turning it on, the picture on the LCD Monitor is darker than normally. However, as it reaches normal temperature, it regains its normal brightness.
- To remove fingerprints, wipe the LCD Monitor with a soft cloth.
- Do not expose the LCD Monitor to direct sunlight. When sunlight falls onto the LCD Monitor, it may be difficult to view the picture.

Extremely high precision technology is employed to produce the LCD Monitor. The result is more than 99.99% active pixels with a mere 0.01% of the pixels inactive or always lit. However, this is not a malfunction and does not affect the recorded picture.



中文

使用菜單屏幕

該攝錄影機可在菜單上顯示各種功能的設定情況，以便能簡單地選擇需要的功能和設定值。

- 1 一邊持續按住[MENU] (菜單) 鈕，一邊將[CAMERA/OFF/VCR]開關，設置在[CAMERA] (攝錄影機) 或 [VCR] (放影機)。
 - 會出現[MENU LANGUAGE SELECT] (菜單語言選擇) 菜單 ①。
- 2 按[SET] (設定) 鈕，選擇需要的語言。
 - 即使您選擇了中文，子菜單也會用英語顯示。
- 3 按[MENU]鈕。
 - 當您在[CAMERA]燈以紅色點亮中按該鈕時，會顯示攝錄影機狀態菜單 ②。
 - 當您在[VCR]燈以綠色點亮中按該鈕時，會顯示放影機狀態菜單 ③。
- 4 轉動[▲▼]環，選擇您需要進入的子菜單。
 - 轉動[▲▼]環，可改變高亮項目。
- 5 按[SET]鈕，顯示所選擇的項目。
- 6 轉動[▲▼]環，選擇需要設定的項目。
- 7 按[SET]鈕，將選擇的項目設定為需要的狀態。

退出菜單時
再次按[MENU]鈕。

- [DATE/TIME SETUP] (日/時設定) 子菜單 (→ 50) 和 [LCD/EVF SETUP] (LCD/EVF設定) 子菜單 (→ 38) 的設定方法與其它子菜單的設定方法稍有不同。
- 您可以在播放錄影帶時顯示菜單，但是不能在拍攝時顯示菜單。同樣，當菜單顯示時，您可以開始播放錄影帶，但是如果此時您開始拍攝，所顯示的菜單將消失。(當使用微電腦連接套件，將攝錄影機的數位靜音端子連接至微電腦時 (→ 162)，將無法在播放中顯示菜單。)
- 請勿在菜單操作進行中關閉電源。

ENGLISH

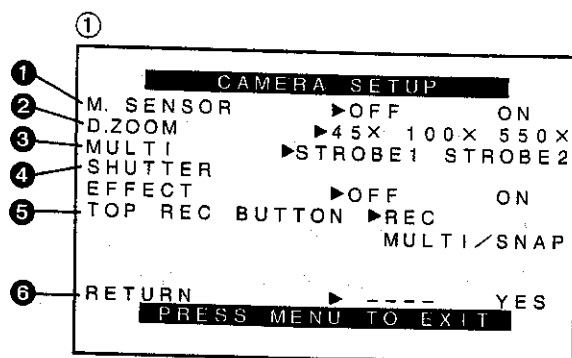
Using the Menus

This Movie Camera displays the settings of various functions in menus to make it easy to select the desired functions and settings.

- 1 Set the [CAMERA/OFF/VCR] Switch either to [CAMERA] or [VCR] while keeping the [MENU] Button pressed.
 - The [MENU LANGUAGE SELECT] Menu ① appears.
- 2 Press the [SET] Button to select the desired language.
 - Even if you select Chinese, the sub-menus are displayed in English.
- 3 Press the [MENU] Button.
 - When you press this button while the [CAMERA] Lamp is lit in red, the Camera Mode Menu ② appears.
 - When you press this button while the [VCR] Lamp is lit in green, the VCR Mode Menu ③ appears.
- 4 Turn the [▲▼] Dial to select the desired sub-menu.
 - Turning the [▲▼] Dial changes the highlighted item.
- 5 Press the [SET] Button to display the selected sub-menu.
- 6 Turn the [▲▼] Dial to select the item to be set.
- 7 Press the [SET] Button to set the selected item to the desired mode.

Exiting the Menu
Press the [MENU] Button again.

- The method for making settings on the [DATE/TIME SETUP] Sub-Menu (→ 50) and [LCD/EVF SETUP] Sub-Menu (→ 38) differs slightly from that of other sub-menus.
- You can display the menu during playback, but not during recording. Also, it is possible to start playback while the menu is displayed, but if you start recording, the displayed menu disappears. (When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), it is not possible to display the menu during playback.)
- Do not turn off the power while performing a menu



中文

菜單功能

菜單圖示僅為解釋功能所用。實際菜單可能會有所不同。

攝錄影機狀態主菜單[CAMERA FUNCTIONS](攝像功能)

1. CAMERA SETUP (攝像設定)
2. DIGITAL EFFECT (數碼功能)
3. TITLE SETUP (標題設定)
4. DATE/TIME SETUP (日/時設定)
5. DISPLAY SETUP (屏幕顯示設定)
6. LCD/EVF SETUP (LCD/EVF 設定)
7. OTHER FUNCTIONS (其他功能)

[CAMERA SETUP](攝像設定)子菜單 ①

- ① 移動感應器控制拍攝[M.SENSOR](→ 100)
- ② 數位變焦[D.ZOOM](→ 88)
- ③ 多畫面狀態[MULTI](→ 90·92)
- ④ 快門效果[SHUTTER EFFECT](→ 76)
- ⑤ 頂部拍攝鈕[TOP REC BUTTON](→ 56·76·90·92·94)
- ⑥ 返回主菜單[RETURN](返回)
如果您將[RETURN](返回)設置在[YES]，菜單將返回主菜單。

ENGLISH

Menu Functions

The illustrations of the menus are for explanation purposes only and the actual menus may be somewhat different.

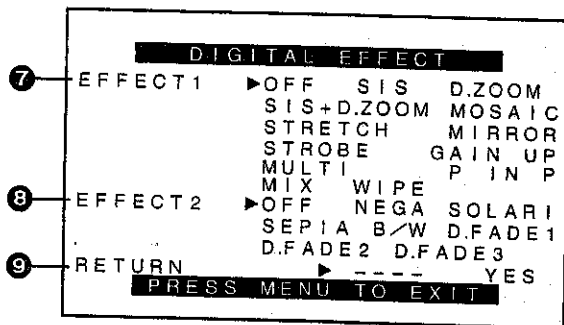
Camera Mode Main-Menu [CAMERA FUNCTIONS]

1. CAMERA SETUP
2. DIGITAL EFFECT
3. TITLE SETUP
4. DATE/TIME SETUP
5. DISPLAY SETUP
6. LCD/EVF SETUP
7. OTHER FUNCTIONS

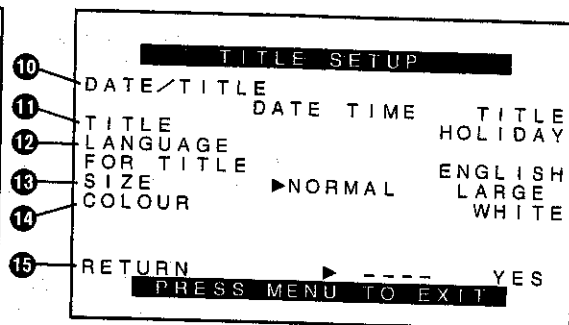
[CAMERA SETUP] Sub-Menu ①

- ① Motion-Sensor-Controlled Recording [M.SENSOR] (→ 100)
- ② Digital Zoom [D.ZOOM] (→ 88)
- ③ Multi Image Modes [MULTI] (→ 90, 92)
- ④ Shutter Effect [SHUTTER EFFECT] (→ 76)
- ⑤ Top Side Recording Button [TOP REC BUTTON] (→ 56, 76, 90, 92, 94)
- ⑥ Returning to the Main-Menu [RETURN]
If you set [RETURN] to [YES], the menu changes back to the Main-Menu.

②



③



中文

[DIGITAL EFFECT] (数碼功能) 子菜單 ②

- 7 數位效果 1[EFFECT1] (→ 78·80·82)
- 8 數位效果 2[EFFECT2] (→ 78·84)
- 9 返回主菜單[RETURN]

[TITLE SETUP] (標題設定) 子菜單 ③

- 10 日期/時間/題名指示[DATE/TITLE] (日期/題名) (→ 52)
- 11 題名[TITLE] (→ 128)
- 12 題名所用語言[LANGUAGE FOR TITLE] (→ 128)
- 13 題名的尺寸[SIZE] (→ 130)
- 14 日期/時間/題名指示的顏色[COLOUR] (→ 128)
- 15 返回主菜單[RETURN]

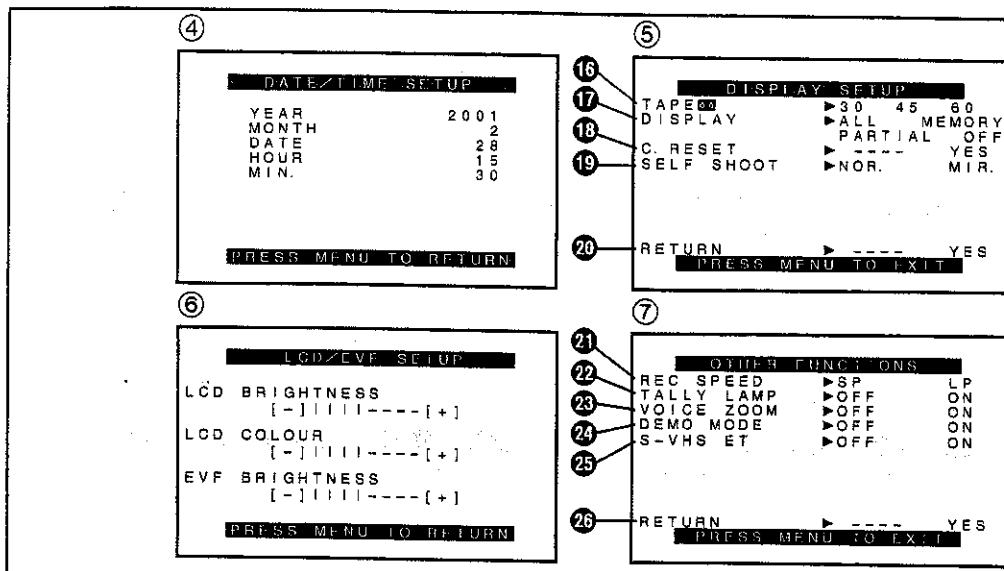
ENGLISH

[DIGITAL EFFECT] Sub-Menu ②

- 7 Digital Effects 1 [EFFECT1] (→ 78, 80, 82)
- 8 Digital Effects 2 [EFFECT2] (→ 78, 84)
- 9 Returning to the Main-Menu [RETURN]

[TITLE SETUP] Sub-Menu ③

- 10 Date/Time/Title Indication [DATE/TITLE] (→ 52)
- 11 Title [TITLE] (→ 128)
- 12 Language of the Title [LANGUAGE FOR TITLE] (→ 128)
- 13 Size of the Title [SIZE] (→ 130)
- 14 Colour of the Date/Time/Title Indication [COLOUR] (→ 128)
- 15 Returning to the Main-Menu [RETURN]



中文

[DATE/TIME SETUP](日/時設定)子菜單④(→50)

[DISPLAY SETUP](屏幕顯示設定)子菜單⑤

16 錄影帶長度[TAPE] (→42)

17 計時器顯示狀態[DISPLAY] (→156)

18 計時器復原[C.RESET] (→154)

19 自拍[SELF SHOOT] (→124)

20 返回主菜單[RETURN]

[LCD/EVF SETUP](LCD/EVF設定)子菜單⑥(→38)

[OTHER FUNCTIONS](其他功能)子菜單⑦

21 錄影速度狀態[REC SPEED]

- 您可在[OTHER FUNCTIONS](其他功能)子菜單的[REC SPEED](錄影速度)上選擇相應的設定，來決定所需的錄影速度(SP狀態或LP狀態)。

([SP]意思為標準放映。[LP]意思為長時間放映。)

- 如果您將[OTHER FUNCTIONS](其他功能)子菜單中的[S-VHS ET]設定為[ON](開)，[REC SPEED]將被自動設定為[SP]。即使您在稍後將[S-VHS ET]設定為[OFF](關)，[REC SPEED]的設定也將保持[SP]不變。所以，在VHS格式下進行拍攝時，如果您希望使用LP狀態，請將[REC SPEED]設定為[LP]。

22 錄影燈[TALLY LAMP] (→56)

23 聲音變焦[VOICE ZOOM] (→60)

24 示範狀態[DEMO MODE] (→178)

25 S-VHS ET狀態[S-VHS ET] (→44)

- 當將S-VHS-C錄影帶插入攝影機時，將出現[S-VHS]指示，取代[S-VHS ET]指示。您可以將此項目設定為[ON]或[OFF]，來選擇或取消S-VHS拍攝格式。
- 如果插入一盤已除去防抹保險片的S-VHS-C錄影帶，將不顯示[S-VHS]指示，而是顯示[S-VHS ET]指示。這並不意味攝影機出現了故障。如果您希望進行拍攝，請使用防抹保險片完好的錄影帶。(→40)

26 返回主菜單[RETURN]

ENGLISH

[DATE/TIME SETUP] Sub-Menu ④ (→50)

[DISPLAY SETUP] Sub-Menu ⑤

16 Tape Length [TAPE] (→42)

17 Counter Display Mode [DISPLAY] (→156)

18 Counter Reset [C.RESET] (→154)

19 Self-Recording [SELF SHOOT] (→124)

20 Returning to the Main-Menu [RETURN]

[LCD/EVF SETUP] Sub-Menu ⑥ (→38)

[OTHER FUNCTIONS] Sub-Menu ⑦

21 Recording Speed Mode [REC SPEED]

- You can select the desired recording speed (SP Mode LP Mode) by selecting the corresponding setting for [REC SPEED] on the [OTHER FUNCTIONS] Sub-Menu ([SP] means Standard Play. [LP] means Long Play.)
- If you set [S-VHS ET] on the [OTHER FUNCTIONS] Sub-Menu to [ON], [REC SPEED] is automatically set to [SP]. Even if you later set [S-VHS ET] to [OFF], [REC SPEED] remains set to [SP]. Therefore, to use the LP Mode when recording in the VHS format, set [REC SPEED] to [LP].

22 Recording Lamp [TALLY LAMP] (→56)

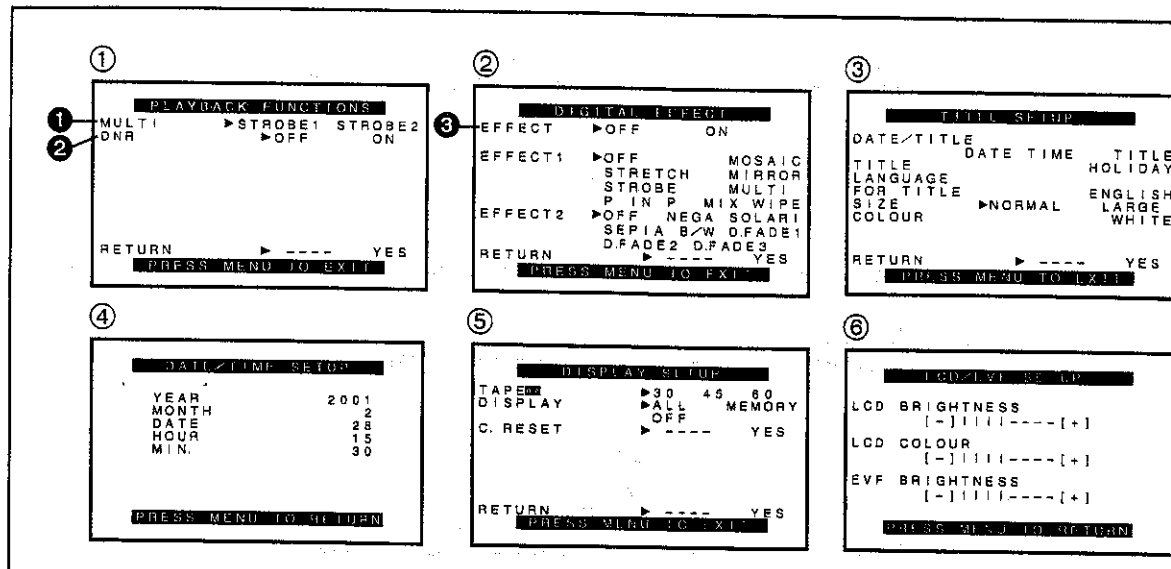
23 Voice Zoom [VOICE ZOOM] (→60)

24 Demonstration Mode [DEMO MODE] (→178)

25 S-VHS ET Mode [S-VHS ET] (→44)

- When an S-VHS-C cassette is inserted in the Movie Camera, [S-VHS] is indicated instead of [S-VHS ET] and you can set this item to [ON] or [OFF] to select or cancel the S-VHS recording format.
- If you insert an S-VHS-C cassette with a broken out erasure prevention tab, [S-VHS ET] is indicated instead of [S-VHS], however, this is not a malfunction. If you want to perform recording, use a cassette with an intact tab. (→40)

26 Returning to the Main-Menu [RETURN]



中文

放影機狀態主菜單[VCR FUNCTIONS](录像功能)

1. PLAYBACK FUNCTIONS (放像功能)
2. DIGITAL EFFECT (數碼功能)
3. TITLE SETUP (標題設定)
4. DATE/TIME SETUP (日/時設定)
5. DISPLAY SETUP (屏幕顯示設定)
6. LCD/EVF SETUP (LCD/EVF 設定)

[PLAYBACK FUNCTIONS](放像功能)子菜單①

- ① 多畫面狀態 [MULTI] (→ 140, 142)
- ② 數位噪聲削減 [DNR] (→ 64)

[DIGITAL EFFECT](數碼功能)子菜單② (→ 138)

- ③ 數位效果開/關 [EFFECT] (→ 138)
- [DIGITAL EFFECT](數碼功能)子菜單中的其它所有項目與 [CAMERA FUNCTIONS](攝像功能)主菜單上 [DIGITAL EFFECT] (數碼功能)子菜單中的對應項目相同。

[TITLE SETUP](標題設定)子菜單③ (→ 52, 128)

- [TITLE SETUP](標題設定)子菜單中的所有項目與 [CAMERA FUNCTIONS](攝像功能)主菜單上 [TITLE SETUP](標題設定)子菜單中的對應項目相同。

[DATE/TIME SETUP](日/時設定)子菜單④ (→ 50)

- [DISPLAY SETUP](屏幕顯示設定)子菜單⑤ (→ 42, 154, 156)
- [DISPLAY SETUP](屏幕顯示設定)子菜單中的所有項目與 [CAMERA FUNCTIONS](攝像功能)主菜單上 [DISPLAY SETUP] (屏幕顯示設定)子菜單中的對應項目相同。

[LCD/EVF SETUP](LCD/EVF 設定)子菜單⑥ (→ 38)

ENGLISH

VCR Mode Main-Menu [VCR FUNCTIONS]

1. PLAYBACK FUNCTIONS
2. DIGITAL EFFECT
3. TITLE SETUP
4. DATE/TIME SETUP
5. DISPLAY SETUP
6. LCD/EVF SETUP

[PLAYBACK FUNCTIONS] Sub-Menu ①

- ① Multi Image Modes [MULTI] (→ 140, 142)
- ② Digital Noise Reduction [DNR] (→ 64)

[DIGITAL EFFECT] Sub-Menu ② (→ 138)

- ③ Digital Effect On/Off [EFFECT] (→ 138)
- All other items on the [DIGITAL EFFECT] Sub-Menu are the same as those on the [DIGITAL EFFECT] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu.

[TITLE SETUP] Sub-Menu ③ (→ 52, 128)

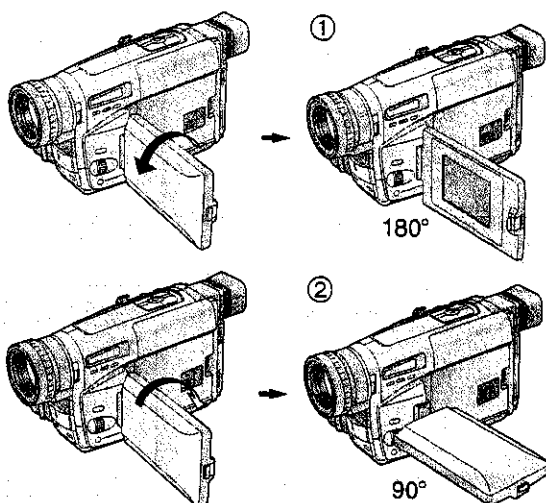
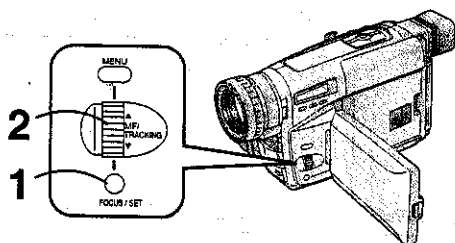
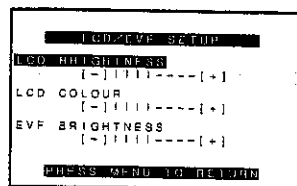
- All items on the [TITLE SETUP] Sub-Menu are the same as those on the [TITLE SETUP] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu.

[DATE/TIME SETUP] Sub-Menu ④ (→ 50)

[DISPLAY SETUP] Sub-Menu ⑤ (→ 42, 154, 156)

- All items on the [DISPLAY SETUP] Sub-Menu are the same as those on the [DISPLAY SETUP] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu.

[LCD/EVF SETUP] Sub-Menu ⑥ (→ 38)



中文

ENGLISH

調節液晶顯示監視器/電子尋像器的亮度和色彩電平

Adjusting the Brightness and Colour Level of the LCD Monitor/Finder

如果您在[VCR FUNCTIONS](录像功能)主菜單或[CAMERA FUNCTIONS](攝像功能)主菜單中選擇[LCD/EVF SETUP](LCD/EVF 設定)子菜單，將顯示下列項目。

If you select the [LCD/EVF SETUP] Sub-Menu of the [VCR FUNCTIONS] or the [CAMERA FUNCTIONS] Main-Menu, the following items are displayed.

液晶顯示監視器亮度[LCD BRIGHTNESS]

LCD Brightness [LCD BRIGHTNESS]

可調節液晶顯示屏幕上畫面之亮度。

To adjust the brightness of the picture on the LCD screen.

液晶顯示監視器色彩電平[LCD COLOUR]

LCD Colour Level [LCD COLOUR]

可調節液晶顯示屏幕上畫面之色彩濃度。

To adjust the colour saturation of the picture on the LCD screen.

電子尋像器亮度[EVF BRIGHTNESS]

Finder Brightness [EVF BRIGHTNESS]

可調節電子尋像器中畫面之亮度。

To adjust the brightness of the picture in the Finder.

1 按[SET](設定)鈕，選擇您希望調節的項目。

1 Press the [SET] Button to select the item that you want to adjust.

2 轉動[▲▼]環，增加或減少條棒指示的垂直條棒。

2 Turn the [▲▼] Dial to increase or decrease the vertical bars of the Bar Indication.

- 條的顯示被分成8個等級。被顯示的垂直條越多，圖像的亮度或色彩度越強。

- The Bar Indication is divided into 8 steps. The more vertical bars are shown, the stronger is the brightness or colour saturation.

退出菜單時

Exiting the Menu

按[MENU]鈕兩次。

Press the [MENU] Button twice.

- 以上這些調節對實際拍攝的圖像沒有任何影響。

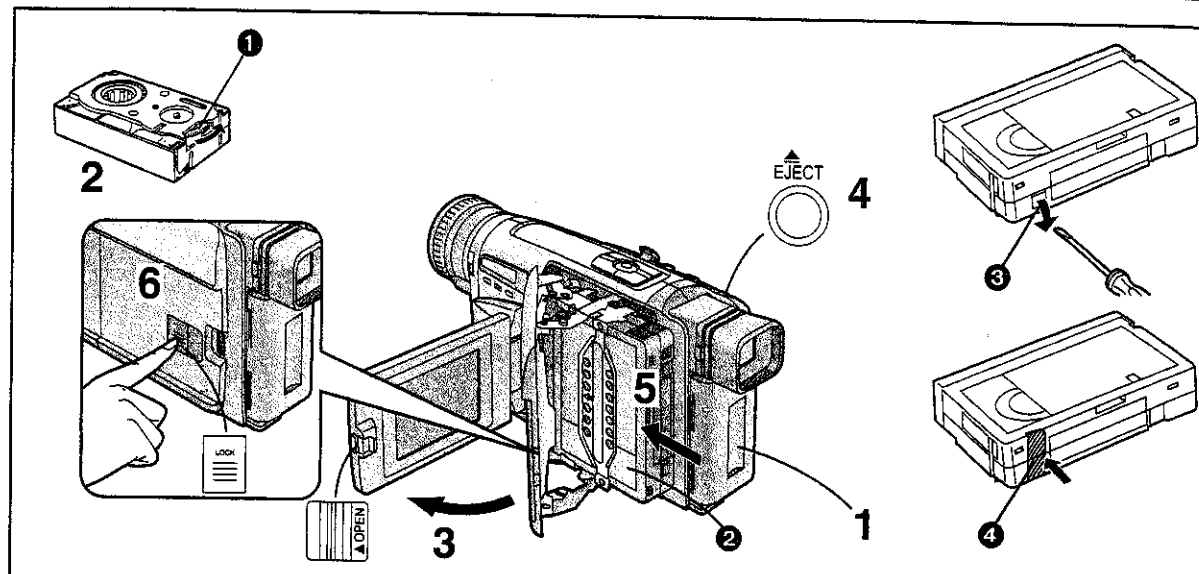
- These adjustments have no influence on the actual picture recorded.

■ 調節液晶顯示監視器的角度

■ Adjusting the Angle of the LCD Monitor

液晶顯示監視器從其標準的垂直位置，最多能向上旋轉180°①，向下旋轉90°②。如果超出此範圍用力旋轉液晶顯示監視器，可能會嚴重損壞本攝錄影機。

The LCD Monitor rotates upward a maximum of 180° ① and downward a maximum of 90° ② from its normal vertical position. Trying to forcefully rotate it beyond this range could seriously damage the Movie Camera.



中文

插入/取出錄影帶時

- 1 連接交流轉接器或裝上充好電的電池。(→ 18, 20)
- 2 撥動牙輪①，捲緊錄影帶。
- 3 向左滑動[▲ OPEN]桿，同時如箭頭所示，將液晶顯示監視器打開約90°。
● 須使液晶顯示監視器保持垂直位置，這樣，當錄影帶室蓋打開時，便不會碰撞液晶顯示監視器。
- 4 按[▲ EJECT](排出)鈕。
- 5 插入錄影帶，使錄影帶的窗口②向外，將其插到底。
- 6 關閉錄影帶室蓋，然後按[LOCK]鈕。

- 如果安裝了電池或連接了交流轉接器，不用打開攝影機即可插入或取出錄影帶。
- 如果插入錄影帶的防抹保險片已被除去，[E]指示將閃爍。

■ 防止意外抹消拍攝內容時

- 在以前拍攝的錄影帶上進行攝影時，將抹消現有的場景和聲音。
- 為了防止重要的拍攝內容被意外抹消，請用螺絲刀弄掉磁帶上的保險片③(某些磁帶具備滑動保險片)。
- 為了用這樣的磁帶再次進行錄影，請用雙層膠帶紙④，牢靠地蓋住保險片所在小孔。

ENGLISH

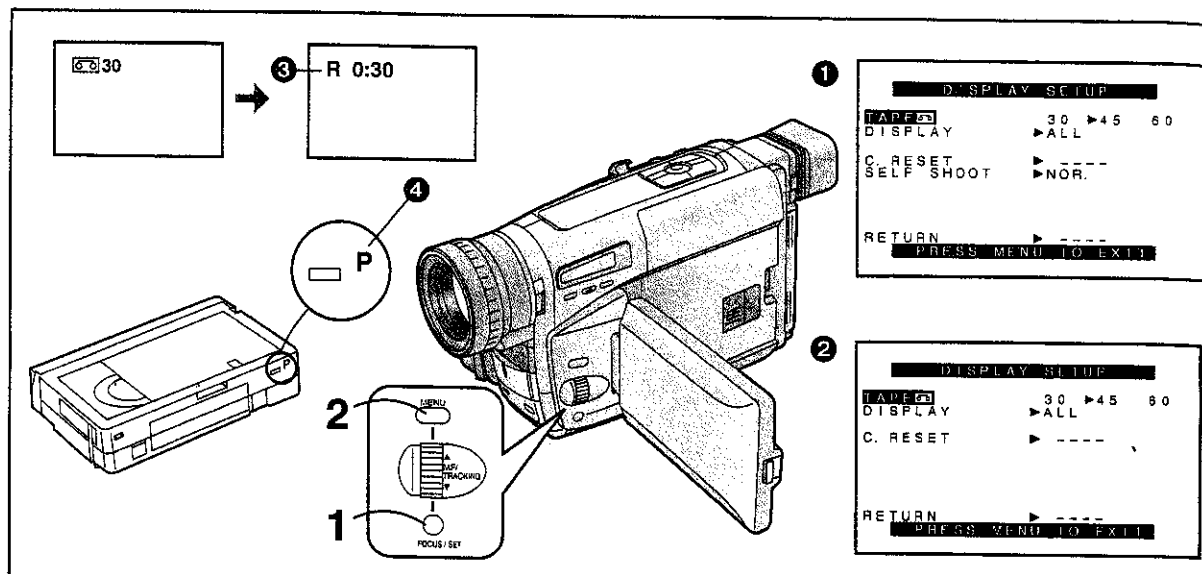
Inserting/Ejecting the Cassette

- 1 Connect the AC Adaptor or attach a charged Battery. (→ 18, 20)
- 2 Turn the cog wheel ① to tighten the tape.
- 3 Slide the [▲ OPEN] Lever to the left and simultaneously open the LCD Monitor in the direction of the arrow approximately 90°.
● Be sure to keep the LCD Monitor in its vertical position so that the Cassette Compartment Cover, when it opens, does not hit the LCD Monitor.
- 4 Press the [▲ EJECT] Button.
- 5 Insert the cassette with the cassette window ② facing outward and push it all the way in.
- 6 Close the Cassette Compartment by pressing the [LOCK] Button.

- If the AC Adaptor or Battery is used to supply power, it is possible to insert or eject the cassette without turning on the Movie Camera.
- If a cassette with broken out erasure prevention tab is inserted, the [E] Indication flashes.

■ Preventing Accidental Erasure of Recordings

- Recording on a previously recorded cassette erases the existing scenes and sound.
- To protect important recordings against accidental erasure, use a screwdriver to break out the tab ③ on the cassette (some cassettes have sliding-type tabs).
- To be able to record again on a protected cassette, firmly cover the hole where the tab was with two layers of adhesive tape ④.



中文

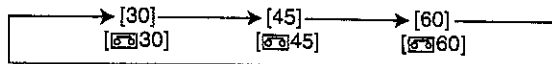
設定正確的磁帶長度時

為了確保拍攝和放影中顯示的磁帶剩餘時間保持正確，需要設定磁帶長度，使其與插入的錄影帶一致。

選擇 [DISPLAY SETUP] (屏幕顯示設定) 子菜單上的 [TAPE] 之後... (→ 28)

1 按[SET](設定)鈕，選擇正確的磁帶長度。

- 被選中的磁帶長度將以標記[▶]加以表示。
- 磁帶長度指示將依下列順序改變：



2 按[MENU](菜單)鈕退出菜單。

①：攝錄影機狀態

②：放影機狀態

確認磁帶剩餘時間時

拍攝和放影中，會自動顯示磁帶剩餘時間指示 ③，所以，您可隨時了解錄影帶上還剩餘多少時間。然而，為了確保磁帶剩餘時間指示的正確性，須在攝錄影機上正確地設定所用錄影帶的磁帶長度。

- 開始拍攝或放影時，磁帶長度指示會消失。且在計算磁帶剩餘時間中，[R]指示 ③ 將在長度指示位置上閃爍。幾秒鐘後，將出現磁帶剩餘時間指示。([R] 意思為剩餘。)
- 當磁帶剩餘時間少於 2 分鐘時，[R] 指示和磁帶剩餘時間指示將開始閃爍。

當您使用帶有[P]標記 ④ 的錄影帶，或其他特殊類型的錄影帶時，磁帶剩餘時間指示可能不精確。

ENGLISH

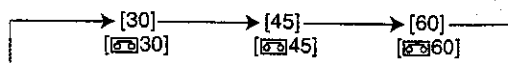
Selecting the Correct Tape Length

To ensure that the Remaining Tape Time Indication displayed during recording and playback is correct, you need to set the tape length that matches that of the inserted cassette.

After selecting [TAPE] on the [DISPLAY SETUP] Sub Menu... (→ 28)

1 Press the [SET] Button to select the correct tape length.

- The selected tape length is marked with the [▶] Mark.
- The Tape Length Indications change in the following order:



2 Press the [MENU] Button to exit the menu.

①：Camera Mode

②：VCR Mode

Confirming the Remaining Tape Time


During recording and playback, the Remaining Tape Time Indication ③ is automatically displayed, so you always know how much time you have left on the cassette. However, to ensure correct display of the remaining tape time, the tape length of the cassette being used must be set correctly on the Movie Camera.

- When recording or playback starts, the Tape Length Indication disappears, and in its place the [R] Indication flashes while the remaining tape time is being calculated. A few seconds later, the Remaining Tape Time Indication appears. ([R] means Remaining.)
- When the remaining tape time is less than 2 minutes, the Indication and the Remaining Tape Time Indication start to flash.

When you use a cassette bearing the [P] Mark ④ or other special types of cassettes, the Remaining Tape Time Indication may not be very precise.

關於 VHS 格式的說明

使用本攝影機進行拍攝時，您可以選擇以下3種不同的拍攝格式：

1. VHS：也被稱為“普通”或“傳統的 VHS”格式
2. S-VHS (Super-VHS，超級 VHS)：是在 VHS 格式基礎上的進一步發展，能提供更高的解像度和圖像質量（將出現[]指示。）
3. S-VHS ET (Super-VHS Expansion Technology，超級 VHS 技術擴展)：本功能允許您在普通的 VHS-C 錄影帶上以 S-VHS 級圖像質量進行拍攝和放影（將出現[S-VHS ET]指示。）

（只有在 SP 狀態下才能以此格式進行拍攝。）

- 當您插入 VHS-C 錄影帶時：
如果您將[OTHER FUNCTIONS]（其他功能）子菜單上的[S-VHS ET]設定為[ON]，拍攝將以 S-VHS ET 格式進行；如果您將[S-VHS ET]設定為[OFF]，拍攝將以 VHS 格式進行。（→ 28）
- 當您插入 S-VHS-C 錄影帶時：
如果您將[OTHER FUNCTIONS]（其他功能）子菜單上的[S-VHS]設定為[ON]，拍攝將以 S-VHS 格式進行；如果您將[S-VHS]設定為[OFF]，拍攝將以 VHS 格式進行。（→ 28）

■ 拍攝和放影


在開始拍攝之前，請先確定以何種 VHS 格式進行拍攝。

錄影帶	拍攝格式	可兼容的放影設備
VHS-C	VHS (SP/LP)	VHS·S-VHS·S-VHS ET·SQPB
	S-VHS ET (僅限於 SP 狀態)	S-VHS·S-VHS ET·SQPB
S-VHS-C	VHS (SP/LP)	VHS·S-VHS·S-VHS ET·SQPB
	S-VHS (SP/LP)	S-VHS·S-VHS ET·SQPB

- 以 S-VHS 或 S-VHS ET 格式拍攝的錄影帶也可以在其它 S-VHS、S-VHS ET 或 SQPB（準 S-VHS 放影）視頻設備上進行放影。（但是，使用某些設備時，可能無法進行放影。發生這種情況時，請直接連接攝影機至電視機來進行放影。（→ 72））
- 如果您希望以可能實現的最高畫質拍攝和播放圖像，或希望將錄影帶長期保存，我們建議您使用 S-VHS-C 錄影帶，以 S-VHS 格式進行拍攝。
- 如果您以 S-VHS ET 格式進行拍攝，對於某些型號的錄影帶，可能無法得到令人滿意的圖像質量。為了防止出現這樣的情況，我們建議您在正式拍攝前先試拍一段圖像並檢查所拍圖像的畫質是否令人滿意。
（為了保證得到最佳畫質，我們建議您使用 HG（high-grade，高等級）型號的錄影帶。）

About the VHS Formats

With this Movie Camera, you can choose one of the following 3 different formats for recording:

1. VHS: also called "normal" or "conventional VHS" format
2. S-VHS (Super-VHS): developed based on the VHS format but featuring higher resolution and picture quality (The [] Indication appears.)
3. S-VHS ET (Super-VHS Expansion Technology): This function allows recording and playback in S-VHS quality picture on a normal VHS-C cassette (The [S-VHS ET] indication appears.)

(Recording in this format is only possible in the SP Mode.)

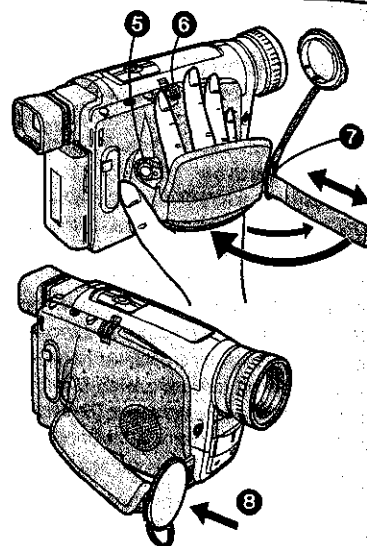
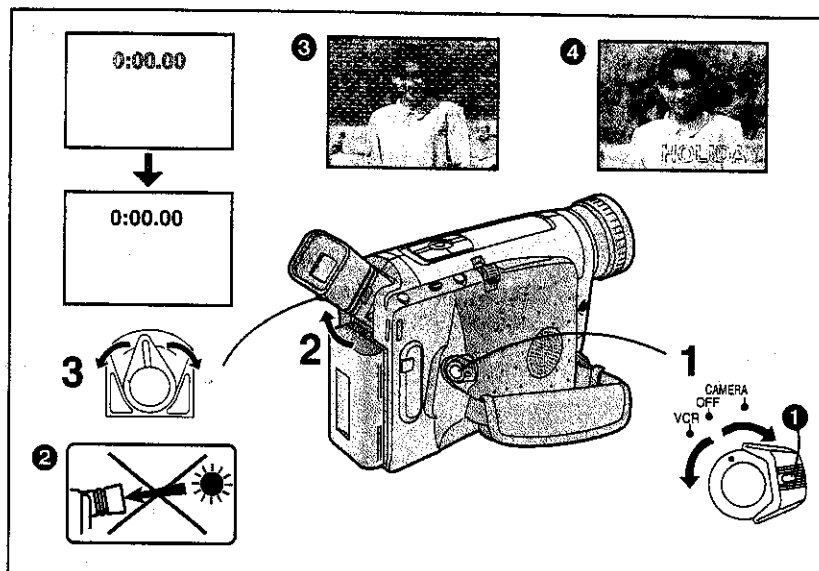
- When you insert a VHS-C cassette:
If you set [S-VHS ET] on the [OTHER FUNCTIONS] Sub-Menu to [ON], recording is performed in the S-VHS ET format, and if you set [S-VHS ET] to [OFF], recording is performed in the VHS format. (→ 28)
- When you insert an S-VHS-C cassette:
If you set [S-VHS] on the [OTHER FUNCTIONS] Sub-Menu to [ON], recording is performed in the S-VHS format, and if you set [S-VHS] to [OFF], recording is performed in the VHS format. (→ 28)

■ Recording and Playback

Before starting to record, decide in which VHS format you want to record.

Cassette	Recording Format	Compatible Playback Equipment
VHS-C	VHS (SP/LP)	VHS, S-VHS, S-VHS ET, SQPB
	S-VHS ET (SP only)	S-VHS, S-VHS ET, SQPB
S-VHS-C	VHS (SP/LP)	VHS, S-VHS, S-VHS ET, SQPB
	S-VHS (SP/LP)	S-VHS, S-VHS ET, SQPB

- A cassette that was recorded in the S-VHS or S-VHS ET format can also be played back on other S-VHS, S-VHS ET or SQPB (S-VHS Quasi Playback) video equipment. (However, with some equipment, playback may not be possible. In that case, connect this Movie Camera directly to the TV. (→ 72))
- If you want to record and play back with highest possible picture quality or store the cassettes for a long time, we recommend that you use S-VHS-C cassettes and record in the S-VHS format.
- If you record in the S-VHS ET format, the picture quality may not be very good with certain types of cassettes. To avoid negative surprises, we recommend that you make a trial recording and confirm that the quality of the recorded picture is satisfactory.
(To ensure optimum picture quality, we recommend the use of HG (high-grade) type cassettes.)



中文

電子尋像器調整

使用電子尋像器之前，請將其調節至您的視力，以使電子尋像器中的指示清晰易辨。

- 1 將[CAMERA/OFF/VCR]開關設置在[CAMERA](攝錄影機)或[VCR](放影機)。
• 一邊按按鈕①，一邊轉動開關。
- 2 如有必要，可將電子尋像器向上傾斜，調節它的角度。
- 3 轉動目鏡校正桿進行調節。

絕對勿將攝錄影機的電子尋像器或鏡頭直接瞄準太陽，否則可能會損壞本機的內部零件。②

如果陽光或其他強烈光線進入電子尋像器，電子尋像器的屏幕上將會出現閃動的雜訊。③如果您避開光線，這種現象將在幾分鐘內消失，而且，這不會影響所拍攝的圖像。

在電子尋像器中顯示反差強烈的物體或顯示菜單後，電子尋像器的畫面上仍將暫時殘留上述圖像的影子。④然而，這並不是故障，也不會影響所拍攝的圖像。

扣抓皮帶調整

調整扣抓皮帶的長度，使得大拇指正好按到拍攝開始/停止鈕⑤，食指或中指正好按到[W/T]變焦桿⑥。

安裝鏡頭蓋

將鏡頭蓋繩的短環安裝在扣抓皮帶上。⑦您可將鏡頭蓋安裝在扣抓皮帶的鏡頭蓋夾上。⑧

ENGLISH

Adjusting the Finder

Before using the Finder, adjust it to your eyesight so that the indications in the Finder are clear and easy to read.

- 1 Set the [CAMERA/OFF/VCR] Switch to [CAMERA] or [VCR].
• Turn the switch while pressing the button ①.
- 2 If necessary, adjust the angle of the Finder by tilting it upward.
- 3 Adjust by turning the Eyepiece Corrector Lever.

Never aim the Movie Camera with its Finder or Lens directly at the sun; this could damage internal parts of the unit. ②

If sunlight or other strong light enters the Finder, sparkling noise occurs on the Finder screen. ③ If you block off the light, this phenomenon disappears after a few minutes and does not affect the recorded picture.

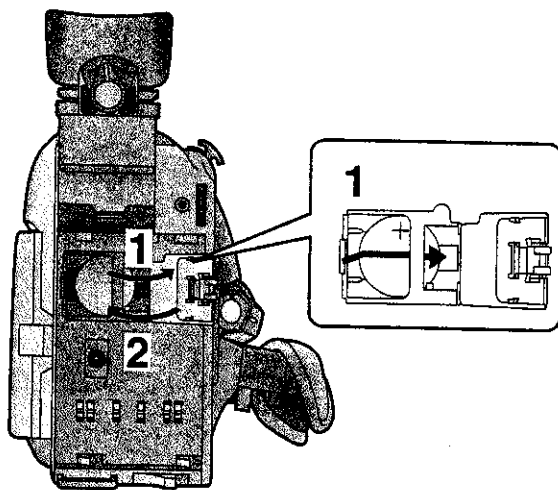
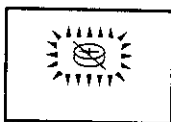
If a subject with strong contrast or a menu is displayed in the Finder, a ghost image may remain temporarily. ④ However, this is not a malfunction and does not affect the recorded picture.

Adjusting the Grip Belt

Adjust the length of the Grip Belt so that you can easily press the Recording Start/Stop Button ⑤ with your thumb and push the [W/T] Zoom Lever ⑥ with your index or middle finger.

Attaching the Lens Cap

Attach the shorter loop of the Lens Cap Cord to the Grip Belt. ⑦ You can attach the Lens Cap to the Lens Cap Holder on the Grip Belt. ⑧




中文

插入鈕扣式電池

在設定日期和時間之前，請先裝入鈕扣式電池(附件)。

1 打開[BACKUP BATTERY](後備電池)蓋，並使鈕扣電池的(+)極面朝外，將其插入電池室。

2 關閉[BACKUP BATTERY]蓋。

- 在裝入或取出鈕扣式電池之前，請務必將[CAMERA/OFF/VCR](攝影機/關/錄影機)開關設置在[OFF](關)。
- 當鈕扣式電池的電量耗盡時，將出現閃爍的[]指示。此時，請更換一個新的CR2025式電池。(電池的使用壽命約為3年。)
- 為了更方便地取下鈕扣式電池，您可以使用帶有尖端的物品。
- 即使關閉攝影機，內藏的時鐘也將繼續工作，它由鈕扣式電池供電。

注意事項

電池若更換不當，則會有爆炸危險。請只使用該設備廠家推薦的同類或同型號電池。並按照廠家的指導扔掉用過的電池。

警告

有火災、爆炸和燃燒之危險。請勿充電、分解、加熱至100℃以上或焚化。請將鈕扣式電池保存在兒童觸摸不到的地方。絕對不能將鈕扣式電池放入口中。若已吞下，請立即就醫。


ENGLISH

Inserting the Button-type Battery

Before setting the date and time, insert the button-type battery (supplied).

1 Open the [BACKUP BATTERY] Cover and insert the button-type battery so that its (+) side is visible.

2 Close the [BACKUP BATTERY] Cover.

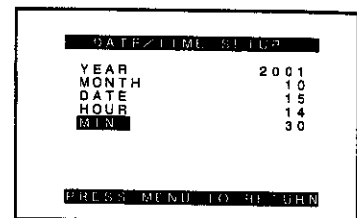
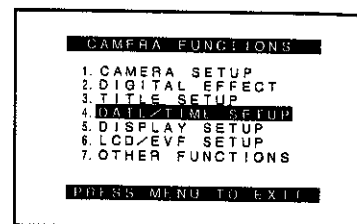
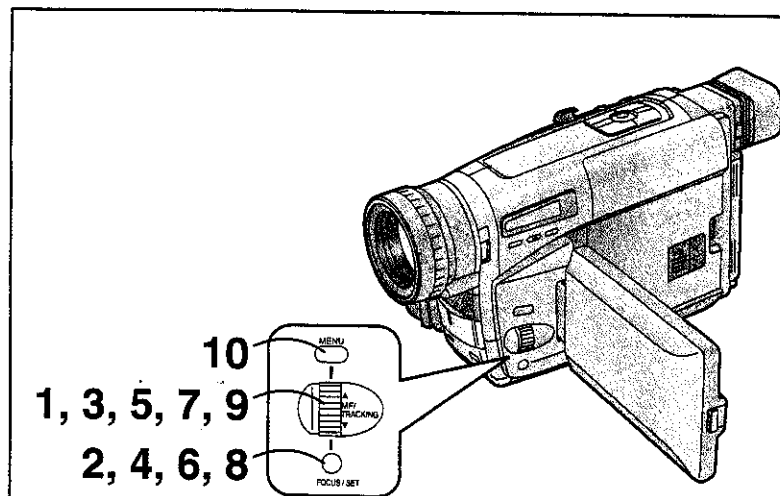
- Before inserting or removing the button-type battery, be sure to set the [CAMERA/OFF/VCR] Switch to [OFF].
- When the button-type battery is exhausted, the [] Indication flashes. In this case, replace it with a new CR2025 battery. (The life of the battery is about 3 years.)
- To make it easier to remove the button-type battery, use a pointed object.
- The internal clock works even when the Movie Camera is turned off, and it consumes power from the button-type battery.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

WARNING

Risk of fire, explosion and burns. Do not recharge, disassemble, heat above 100°C or incinerate. Keep the Button-Type battery out of the reach of children. Never put Button-Type battery in mouth. If swallowed call your doctor.



中文

設定日期和時間

如果您在[CAMERA FUNCTIONS](攝像功能)主菜單中選擇[DATE/TIME SETUP](日/時設定)子菜單，將出現上圖所示的菜單。

日期和時間的初始設定為2000年1月1日0時00分。

例如：將時鐘設定為2001年10月15日14:30時。

- 1 轉動[▲▼]環，設定至[2001]。
 - 年數將以下列順序改變：
...1990...1991...2000...2089...1990...
 - 2 按[SET](設定)鈕，選擇[MONTH](月)。
 - 3 轉動[▲▼]環，設定至[10]。
 - 4 按[SET]鈕，選擇[DATE](日)。
 - 5 轉動[▲▼]環，設定至[15]。
 - 6 按[SET]鈕，選擇[HOUR](小時)。
 - 7 轉動[▲▼]環，設定至[14]。
 - 8 按[SET]鈕，選擇[MIN.](分鐘)。
 - 9 轉動[▲▼]環，設定至[30]。
 - 10 按[MENU](菜單)鈕，結束日期和時間設定。
 - 將從[00]秒開始進行時鐘操作。
 - 再按一次該按鈕，使菜單消失。
- 當未將鈕扣式電池裝入攝錄影機或者鈕扣式電池的電量耗盡時，如果您選擇[DATE/TIME SETUP](日/時設定)子菜單，主菜單將消失，並代之以閃爍的指示[]。請裝入一個新的鈕扣式電池(→48)，然後重新設定日期和時間。
 - 由於攝錄影機內藏的時鐘會有少量誤差，請在拍攝之前對所指示的時間加以檢查和確認。
 - 本時鐘系統採用24小時制。

ENGLISH

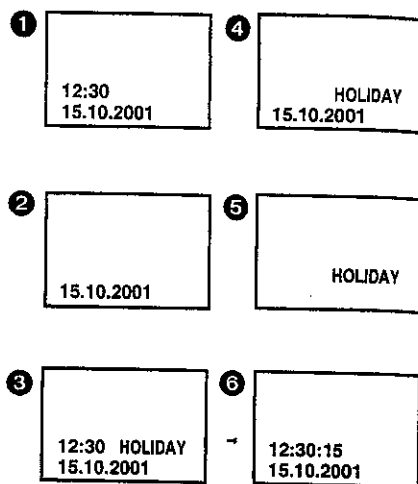
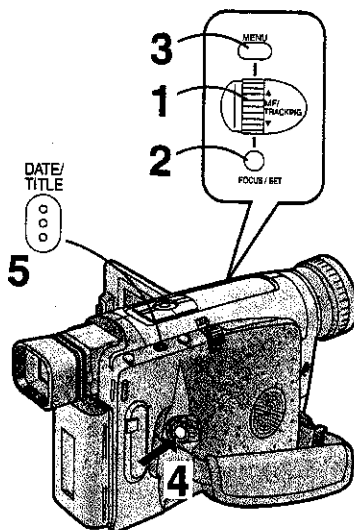
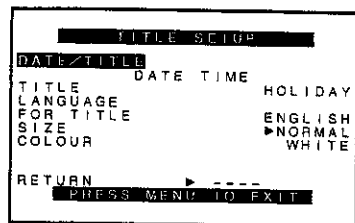
Setting the Date and Time

If you select the [DATE/TIME SETUP] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu, the menu shown above appears.

The initial setting of date and time is 0:00, 1st January, 2000.

For example: To set the clock to 15th October 2001, 14:30.

- 1 Turn the [▲▼] Dial to set to [2001].
 - The years change in the following order:
...1990...1991...2000...2089...1990...
 - 2 Press the [SET] Button to select [MONTH].
 - 3 Turn the [▲▼] Dial to set to [10].
 - 4 Press the [SET] Button to select [DATE].
 - 5 Turn the [▲▼] Dial to set to [15].
 - 6 Press the [SET] Button to select [HOUR].
 - 7 Turn the [▲▼] Dial to set to [14].
 - 8 Press the [SET] Button to select [MIN.].
 - 9 Turn the [▲▼] Dial to set to [30].
 - 10 Press the [MENU] Button to finish the date and time setting.
 - The operation of the clock starts from [00] seconds.
 - Pressing the button one more time makes the menu disappear.
- If you select the [DATE/TIME SETUP] Sub-Menu when the button-type battery is not inserted into the Movie Camera or is exhausted, the Main-Menu disappears and the [] Indication flashes instead. Insert a new button-type battery (→48) and then set the date and time again.
 - As the Movie Camera's built-in clock is subject to slight imprecision, be sure to check the indicated time before recording.



中文

在畫面中添加日期/時間/題名進行拍攝時

在顯示出[TITLE SETUP](標題設定)子菜單後... (→ 28)

- 1 轉動[▲▼]環，選擇[DATE/TITLE](日期/題名)。
- 2 按[SET](設定)鈕，選擇需要的指示。
 - 指示將依 ①～⑥ 的順序進行改變。
 - ① [DATE TIME](日期時間) → ② [DATE](日期) →
 - ③ [DATE TIME TITLE](日期時間題名) →
 - ④ [DATE TITLE](日期題名) →
 - ⑤ [TITLE](題名) →
 - ⑥ [DATE TIME+SECONDS](日期時間+秒鐘) →
 - 如果攝錄影機中未裝有給內藏時鐘供電的鈕扣式電池，或其電量耗盡時，將僅顯示題名。(→ 48)

- 3 按[MENU](菜單)鈕，退出菜單。
 - 將出現被選擇的日期/時間/題名指示。

- 4 按拍攝開始/停止鈕，開始拍攝。

■ 刪除日期/時間/題名指示時

- 5 在拍攝或攝錄影機處於拍攝暫停狀態中，按[DATE/TITLE]鈕，使日期/時間/題名指示消失。

- 關閉攝錄影機，然後重新打開，將不再顯示以前選擇的日期/時間/題名指示。使其再次出現時，請按[DATE/TITLE]鈕 1 次。
- 在取出電池或拔下交流轉接器之前，請務必先將攝錄影機關閉。在攝錄影機打開時斷開電源供應，將會抹去儲存在記憶中的日期/時間/題名指示 (→ 128)。

ENGLISH

Recording with the Date/Time/Title Superimposed in the Picture

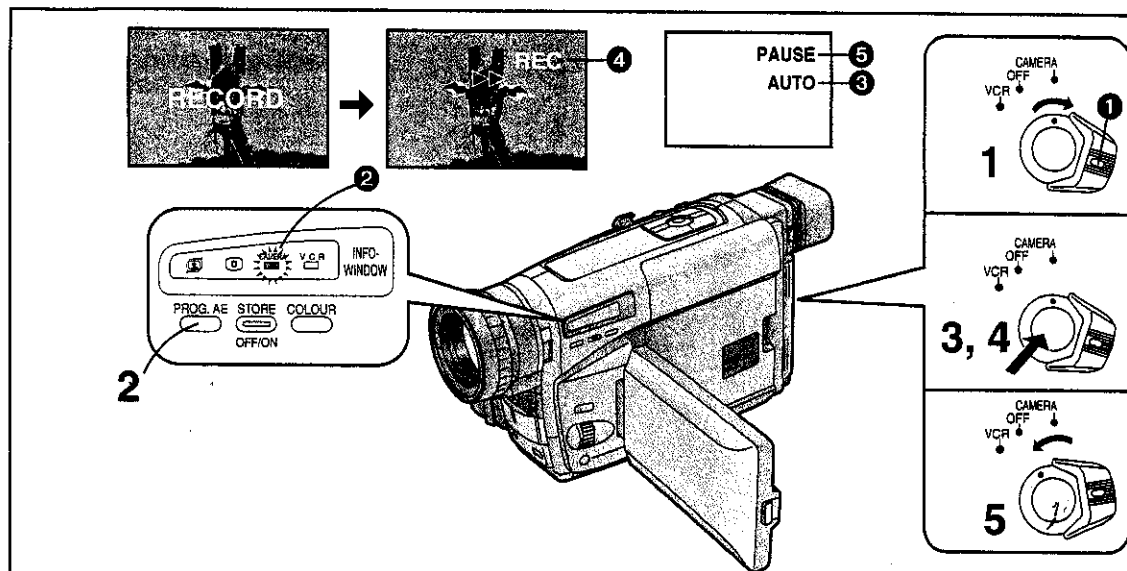
After displaying the [TITLE SETUP] Sub-Menu... (→ 28)

- 1 Turn the [▲▼] Dial to select [DATE/TITLE].
- 2 Press the [SET] Button to select the desired indication.
 - The indications change in the order ① to ⑥.
 - ① Date and Time → ② Date →
 - ③ Date, Time and Title → ④ Date and Title →
 - ⑤ Title → ⑥ Date and Time with seconds →
 - If the button-type battery for the built-in clock is not inserted into the Movie Camera or is exhausted, only the title is displayed. (→ 48)
- 3 Press the [MENU] Button to exit the menu.
 - The selected Date/Time/Title Indication appears.
- 4 Press the Recording Start/Stop Button to start recording.

■ Deleting the Date/Time/Title Indication

- 5 During recording or when the Movie Camera is in the Recording Pause Mode, press the [DATE/TITLE] Button to make the Date/Time/Title Indication disappear.

- After turning the Movie Camera off and then on again, the previously selected Date/Time/Title Indication is no longer displayed. To make it appear again, press the [DATE/TITLE] Button once.
- Be sure to turn the Movie Camera off before removing the Battery or disconnecting the AC Adaptor. Disconnecting the power supply while the Movie Camera is on erases the Date/Time/Title Indication (→ 128) stored in memory.



中文

用全自動狀態進行拍攝時

全自動狀態會自動調整白色平衡和聚焦。然而，如您喜歡，也可手動調整其一或兩個鈕。(→ 106, 110)

在弱光環境下拍攝時，畫面可能會產生雜訊，或清晰度不足。此時，建議您使用 IR/影像直流通燈(選購品)等，將場景照亮。

- 1 將[CAMERA/OFF/VCR]開關設置在[CAMERA]。
 - 一邊按住鈕 ①，一邊轉動開關。
 - [CAMERA]指示燈 ② 亮起。
- 2 重複按[PROG. AE](程序AE)鈕，直至出現[AUTO](自動)指示 ③。
 - 出廠時的最初設定為[AUTO]。
- 3 按拍攝開始/停止鈕，開始拍攝。
 - 拍攝開始，並且將出現[>>>]和[REC]指示 ④。信號燈(→ 56)將在拍攝過程中保持點亮。([REC]意思為拍攝。)
- 4 暫停拍攝時：
 - 再次按拍攝開始/停止鈕。
 - 將出現[PAUSE](暫停)指示 ⑤。
- 5 結束拍攝時：
 - 將[CAMERA/OFF/VCR]開關設置在[OFF]。

• 如果您使用E55型錄影帶進行拍攝，在放影時畫面上可能會出現某些扭曲失真。然而，這並不表示攝影機出現了故障。

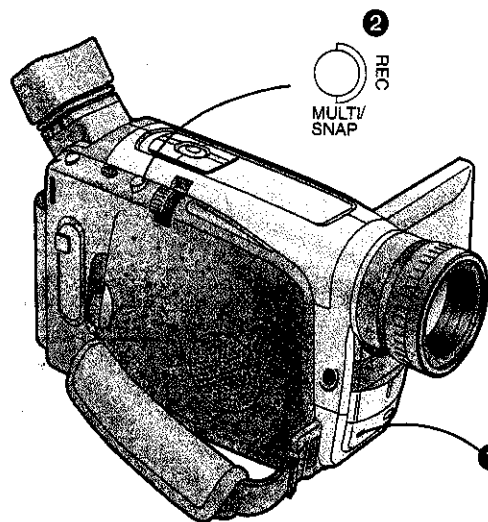
ENGLISH

Recording in the Full Auto Mode

The Full Auto Mode adjusts the white balance and focus automatically. However, if you want, you can also adjust either one or both of them manually. (→ 106, 110)

When recording in a dimly lit location, the picture may become noisy and less sharp, so we recommend that you use the IR/Video DC Light (optional), etc. to brighten up the scene.

- 1 Set the [CAMERA/OFF/VCR] Switch to [CAMERA].
 - Turn the switch while pressing the button ①.
 - The [CAMERA] Lamp ② lights.
- 2 Press the [PROG. AE] Button repeatedly until the [AUTO] Indication ③ appears.
 - The initial setting is [AUTO].
- 3 Press the Recording Start/Stop Button to start recording.
 - Recording starts and the [>>>] Indication and the [REC] Indication ④ appear. The Tally Lamp (→ 56) remains lit during recording. ([REC] means Recording).
- 4 To pause recording: Press the Recording Start/Stop Button again.
 - The [PAUSE] Indication ⑤ appears.
- 5 To finish recording: Set the [CAMERA/OFF/VCR] Switch to [OFF].
 - If you use an E55 type cassette for recording, the picture may contain some distortion when you play it back. However, this is not a malfunction of the Movie Camera.



中文

信號燈 ①

如果您不想讓信號燈在拍攝中亮起時，請將[OTHER FUNCTIONS] (其他功能)子菜單上的[TALLY LAMP] (信號燈)設定為[OFF]。(→ 28)

- 如果您讓攝影機處於拍攝暫停狀態超過6分鐘時，本機將自動關閉，以保護磁帶，並節省電池能源。從此狀態恢復拍攝時，請將[CAMERA/OFF/VCR]開關設置在[OFF] (關)，然後重新將其設置在[CAMERA] (攝影機) 狀態。

■ 使用[REC] (拍攝) 鈕，作為拍攝開始/停止鈕

- 對於某些拍攝角度，作為拍攝開始/停止鈕來使用[REC]鈕 ② 會更方便。
- 希望將[REC]鈕作為拍攝開始/停止鈕來使用時，請將[CAMERA SETUP] (攝像設定)子菜單中的[TOP REC BUTTON] (頂部拍攝鈕)設定為[REC]。(→ 28)

■ 弱光環境下的DNR (數位噪聲削減) 功能

在弱光環境下，數位噪聲削減功能會自動啟動，以消除畫面中的雜訊。此時，運動目標物的後方可能會拖有少量雜波條紋 ③，但是，這並不表示攝影機發生了故障或功能失常。

ENGLISH

Tally Lamp ①

If you do not want the Tally Lamp to light during recording, set [TALLY LAMP] on the [OTHER FUNCTIONS] Sub-Menu to [OFF]. (→ 28)

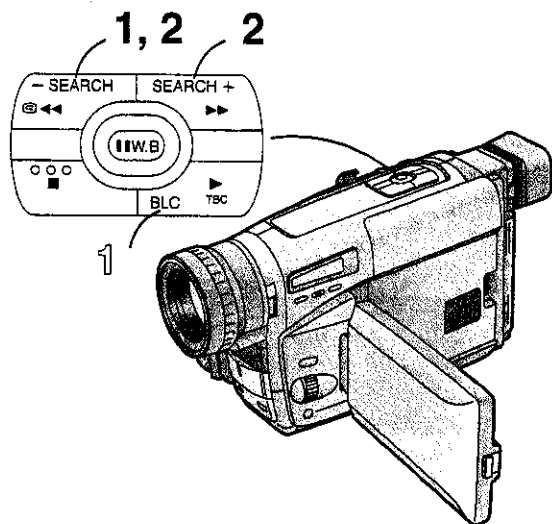
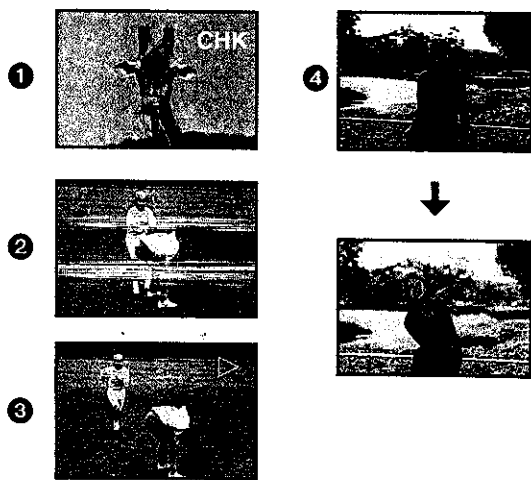
- If you leave the Movie Camera in the Recording Pause Mode for more than 6 minutes, it automatically switches off to protect the tape and to conserve battery power. To resume recording from this condition, set the [CAMERA/OFF/VCR] Switch to [OFF] and then to [CAMERA] again.

■ Using the [REC] Button as the Recording Start/Stop Button

- For certain recording angles, it may be more convenient to use the [REC] Button ② as the Recording Start/Stop Button.
- To be able to use the [REC] Button as the Recording Start/Stop Button, set [TOP REC BUTTON] on the [CAMERA SETUP] Sub-Menu to [REC]. (→ 28)

■ About D.N.R. in a dimly lit location

In a dimly lit location, the Digital Noise Reduction is activated automatically to reduce noise in picture. In this case the noise may seem to draw after moving subject ③. However, this is not a malfunction of the Movie Camera.



中文

檢查錄過場景的結尾時 (拍攝檢查功能)

可在拍攝暫停狀態下，播放上次拍攝的最後幾秒鐘場景。

- 1 在拍攝暫停狀態下短暫地按下 **[G]** 鈕。
 - 將出現 **[CHK]** 指示 ❶。之後，攝錄影機將恢復拍攝暫停狀態，準備拍攝下一個場景。
(**[CHK]** 意思為檢查。)

在拍攝暫停中觀看已錄場景 (攝錄影機尋影功能)

該功能可以簡單地在以前錄過的場景或錄影帶上，尋影到您想開始拍攝新場景之處。另外，該功能還能確保場景與場景之間的圓滑接錄，而毫無畫面失真。

- 2 在拍攝暫停狀態下持續按住 **[-SEARCH]** 鈕 (或 **[SEARCH+]** 鈕)。

- ❷: 反向尋影
- ❸: 正向尋影

逆光場景的拍攝 (逆光狀態)

可防止圖像上逆光拍攝的目標物亮度太暗。
在某些狀態下，該功能可能無法正常工作。

- 1 持續按住逆光鈕 **[BLC]**。
 - 圖像會整體變亮。❹

ENGLISH

Checking the End of a Recorded Scene (Recording Check Function)

To play back the final few seconds of the last recorded scene in the Recording Pause Mode.

- 1 Press the **[G]** Button briefly in the Recording Pause Mode.
 - The **[CHK]** Indication ❶ appears. After that, the Movie Camera returns to the Recording Pause Mode and is ready for recording the next scene.
(**[CHK]** means Check.)

Viewing Recorded Scenes During Recording Pause (Camera Search Function)

This function makes it easy to search for a point in a previously recorded scene or cassette from which you want to start recording a new scene. In addition, it ensures smooth scene-to-scene transitions free from picture distortion.

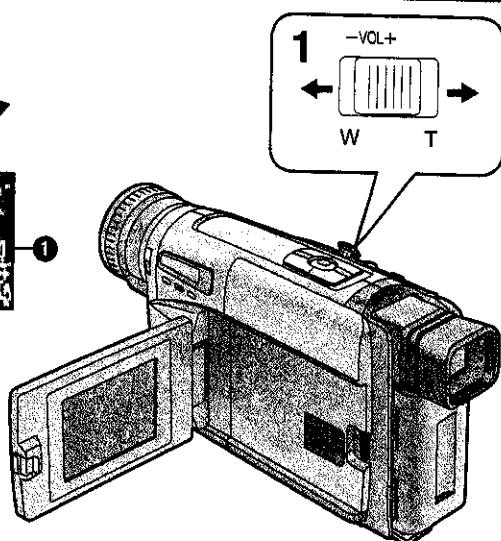
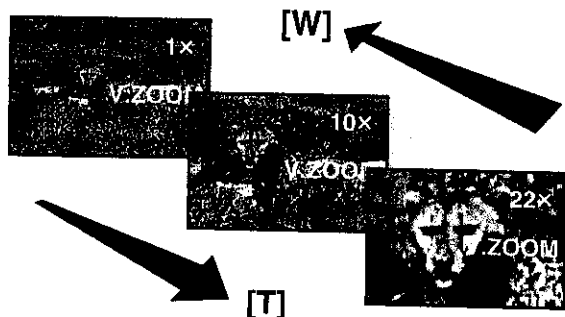
- 2 Keep the **[-SEARCH]** Button (or the **[SEARCH+]** Button) pressed in the Recording Pause Mode.

- ❷: Reverse Search
- ❸: Forward Search

Recording Backlit Scenes (Backlight Mode)

To prevent the backlit subject from being recorded very dark. Under some conditions, this function may not work properly.

- 1 Keep the Backlight Button **[BLC]** pressed.
 - The picture brightens up as a whole. ❹



中文

ENGLISH

拉近/拉遠變焦

Zooming In/Out

拍攝拉近的目標物和廣角鏡頭，可為您的影像增添特殊效果。

Recording close-ups of your subjects and recording wide-angle shots add special effects to your videos.

1 拍攝更廣的視角 (拉遠) 時：

朝[W]方向按[W/T]變焦桿。

放大目標物 (拉近) 時：

朝[T]方向按[W/T]變焦桿。

- 變焦放大率指示將出現幾秒鐘。
- 越將[W/T]變焦桿推向[W]或[T]之處，其變焦速度也就越快。
- 在最大望遠設定(當您已經拉近)時，只能在鏡頭和目標物之間的距離大於1.8米時才能進行精確聚焦。

1 To record a wider view (Zooming-out):

Push the [W/T] Zoom Lever toward [W].

To enlarge your subject (Zooming-in):

Push the [W/T] Zoom Lever toward [T].

- The Zoom Magnification Indication appears for a few seconds.

聲音變焦

在對距離較遠的人物進行拍攝時，本功能可以依據攝錄影機鏡頭的變焦位置，通過增強人聲頻率範圍的方法，更響亮和更清晰地錄製他的聲音。啟動聲音變焦功能時，請將[CAMERA FUNCTIONS](攝像功能)主菜單中[OTHER FUNCTIONS](其他功能)子菜單上的[VOICE ZOOM](聲音變焦)設定為[ON]。(→ 28)

- The further you push the [W/T] Zoom Lever toward [W] or [T], the faster the zooming speed becomes.
- In the maximum telephoto setting (when you have zoomed in), precise focusing is only possible for subjects that are more than 1.8 m from the lens.

- 將出現[V.ZOOM]指示 ①。

- 聲音變焦功能只在 14 × 的變焦範圍內有效：超過此變焦倍率後，聲音變焦效果保持不變。
- 根據所拍人物的距離和環境音響，聲音變焦功能可能無明顯效果。

Voice Zoom

This function makes it possible to record the voices of distant persons slightly louder and more clearly, by emphasizing the frequency range of human voices according to the zoom position of the Movie Camera's lens. To activate the Voice Zoom Function, set [VOICE ZOOM] on the [OTHER FUNCTIONS] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu to [ON]. (→ 28)

小目標物的超拉近鏡頭拍攝(微距拉近功能)

當變焦放大率為1倍時，在鏡頭和目標物之間，攝錄影機能夠對目標物進行聚焦的距離將縮短為約5毫米。這樣便可拍攝昆蟲之類的極小目標物。

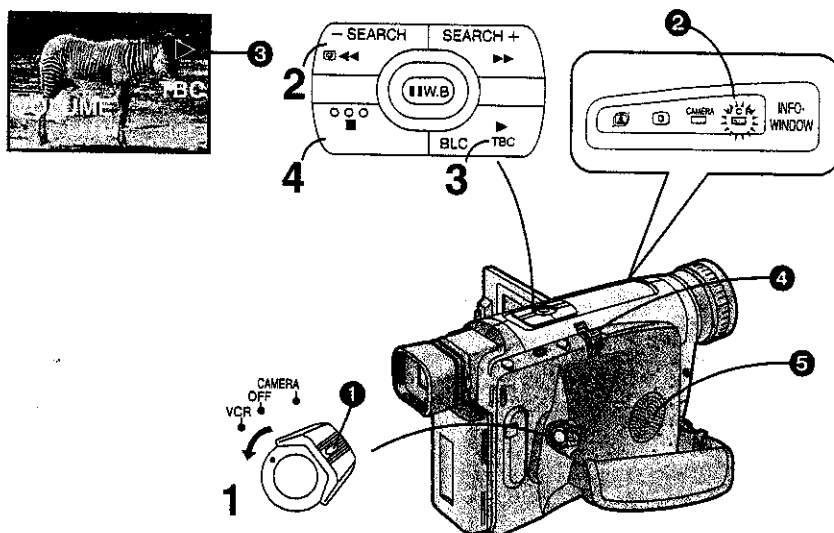
- The [V.ZOOM] Indication ① appears.
- The Voice Zoom Function works within the zoom range up to 14x: above that point, its effect remains unchanged.
- Depending on the distance of the person(s) and the surrounding sounds, the Voice Zoom Function may not have much effect.

- 當利用微距拉近功能時，建議您使用IR/Video DC Light (IR/影像直流燈)(選購品)等，而非0 Lux夜景功能，以使場景更亮。

Recording Extra Close-up Shots of Small Subjects (Macro Close-up Function)

When the zoom magnification is 1x, the Movie Camera can focus on subjects down to a distance of approximately 5 mm between lens and subject. This allows recording very small subjects such as insects.

- When using the Macro Close-up Function, we recommend that you use the IR/Video DC Light (optional), etc. rather than the 0 Lux Night View Function to brighten up the scene.



中文

放影

在攝錄影機上觀看放影時

您可觀看已拍攝場景的播放。

1 將[CAMERA/OFF/VCR]開關設置在[VCR](錄影機)。

- 一邊按住鈕①，一邊轉動開關。
- [VCR]指示燈②亮起。

2 按[◀◀]鈕。

- 磁帶開始倒帶。當磁帶到頭時，會自動停止倒帶。

3 按[▶] (放影) 鈕。

- 開始放影，且將出現[▷]指示③。
- 當錄影帶到達結尾時，將自動倒帶至頭。

■ 停止放影時

4 按[■]鈕。

■ 調節音量大小

將[-VOL+]桿④推向[+]，可增大音量，推向[-]，可減少音量。調節時將出現[VOLUME](音量)指示，同時垂直條的個數將依照您的調節增加或減少。當您鬆開[-VOL+]桿時，此顯示將自動消失。

您還可以通過遙控器來調節音量。按[T]鈕可增大音量，按[W]鈕可減少音量。

這種調節功能只限在放影時使用。

- 因為揚聲器⑤中裝有磁鐵，請不要將錄影帶靠近揚聲器。否則，磁場可能對錄影帶中已拍攝的畫面有不良影響。
- 在放影變焦狀態下，將無法調節音量。

ENGLISH

Playback

Watching Playback on the Movie Camera

You can watch playback of the recorded scenes.

1 Set the [CAMERA/OFF/VCR] Switch to [VCR].

- Turn the switch while pressing the button ①.
- The [VCR] Lamp ② lights.

2 Press the [◀◀] Button.

- The tape starts to rewind. When the tape reaches the beginning, the rewinding automatically stops.

3 Press the [▶] Button.

- Playback starts and the [▷] Indication ③ appears.
- When the tape reaches the end, it automatically rewinds to the beginning.

■ Stopping Playback

4 Press the [■] Button.

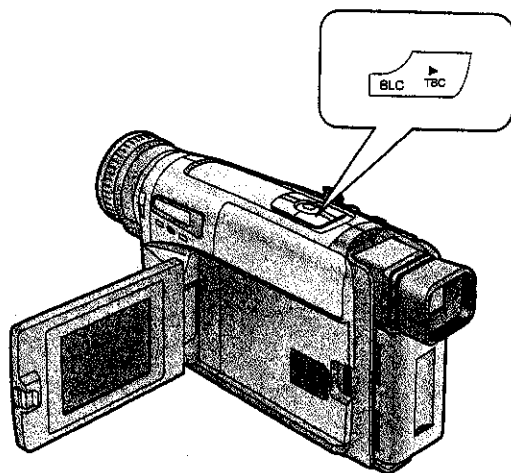
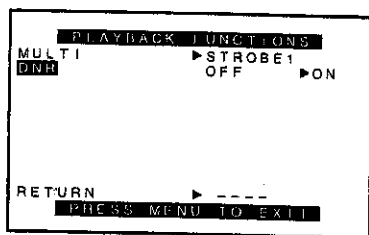
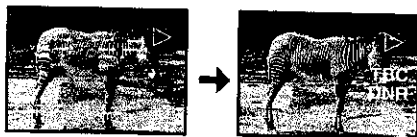
■ Adjusting the Sound Volume

Push the [-VOL+] Lever ④ toward [+] to increase the volume or push it toward [-] to decrease the volume. The [VOLUME] Indication appears and the number of bars increases or decreases. When you release the Lever, this indication disappears.

You can also adjust the volume with the Remote Controller. Increase the volume by pressing the [T] Button, or decrease it by pressing the [W] Button.

This adjustment is only possible during playback.

- Because the speaker ⑤ contains a magnet, do not bring a cassette near the speaker. It could adversely influence the recorded content.
- In the Playback Zoom Mode, it is not possible to adjust the sound volume.



中文

TBC (時基校正器) 功能

某些錄影帶時，畫面可能有輕微晃動或其他失真。為了使此類失真降至最低，並確保穩定的播放畫面，該攝錄影機裝備了TBC功能。在開始放影時，該功能將在幾秒鐘內自動啟動，且將出現[TBC]指示。

取消TBC功能時

對於某些錄影帶，TBC功能可能會使播放中的畫面產生輕微的垂直晃動或其他失真。

在此情況下，首先請嘗試調節一下軌跡(→ 68)。若此舉並未改進畫質時，請持續按住[TBC]鈕，直至[TBC]指示消失，以取消TBC功能。

如果您想重新啟動TBC功能時，請按住[TBC]鈕幾秒鐘，直至[TBC]指示重新出現為止。

即使您已經取消了TBC功能，當您將攝錄影機從攝錄影機狀態切換至放影機狀態時，該功能將自動啟動。

■ 在下列情況下，TBC功能不會工作：

- 在快進尋影、倒帶尋影或靜止放影狀態下
- 使用攝錄影機尋影或拍攝檢查功能時
- 調節軌跡時
- 播放磁帶上尚未錄影部分時

當您播放被拉長、收縮或其它已損壞的錄影帶時，TBC功能將無法正常工作(該功能可能會反覆啟動和關閉)。在此情況下，請取消TBC功能。

DNR (數位噪聲削減) 功能

- 設定該項目可以減少放影中畫面上的雜訊和失真。請將[PLAYBACK FUNCTIONS](放像功能)子菜單中的[DNR]設定為[ON]。
- 只有在啟動TBC功能時([TBC]指示顯示時)，才能使用該功能。
- 當在攝錄影機處於放影機狀態下使用放像變焦功能、多畫面功能、畫中畫功能、混合功能和划變功能(→ 138、152)時，數位噪聲削減功能將不工作。
- 如果正在播放的圖像或圖像中被攝物的運動看起來不自然，請將[DNR]設定為[OFF]。
- 當您準備將場景從攝錄影機複製或編輯至VCR(錄影機)時，請將[DNR]設定為[OFF]。

ENGLISH

TBC (Time Base Corrector) Function

Playback of certain cassettes can cause slight horizontal shaking of the picture or other distortion. To minimise such distortion and ensure a stable playback picture, this Movie Camera is equipped with the TBC Function. This function is automatically activated within a few seconds after playback has started, and the [TBC] Indication appears.

Cancelling the TBC Function

With certain cassettes, however, the TBC Function could cause slight vertical shaking or other distortion in the playback picture.

In this case, first try to adjust the tracking (→ 68). If this does not improve the picture, cancel the TBC Function by keeping the [TBC] Button pressed until the [TBC] Indication disappears. If you want to turn the TBC Function on again, press the [TBC] Button for a few seconds until the [TBC] Indication reappears.

Even if you cancel the TBC Function, it is automatically turned back on when you switch the Movie Camera from the Camera Mode to the VCR Mode.

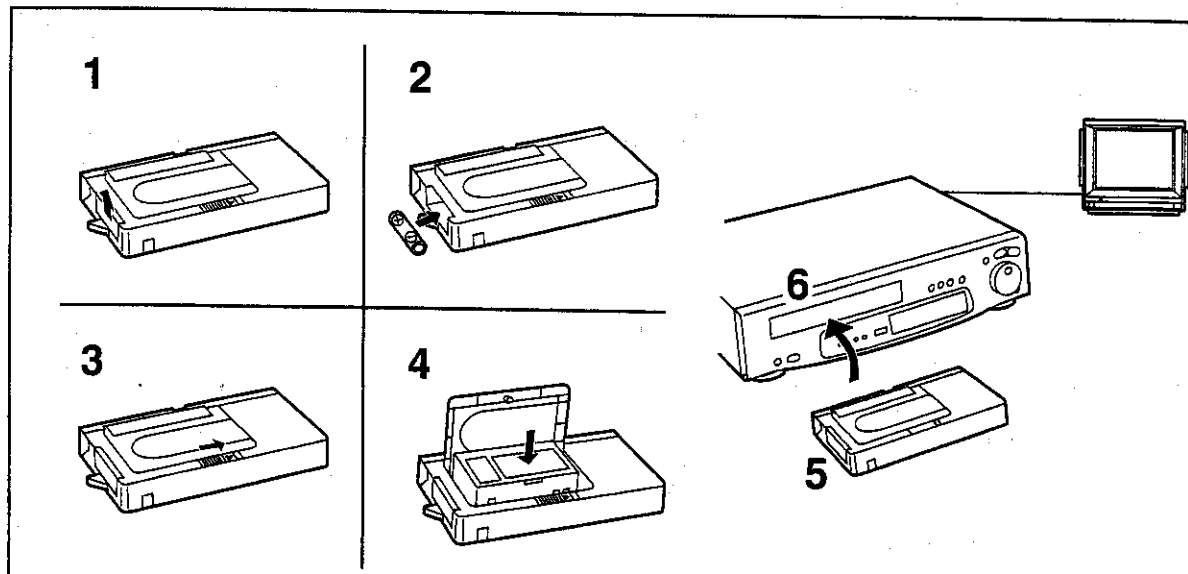
■ In the Following Cases, the TBC Function Does Not Work:

- In the Cue, Review or Still Playback Mode
- When using the Camera Search or Recording Check Function
- When adjusting the tracking
- When playing back an unrecorded part on the tape

When you play back a cassette with stretched, shrunk or otherwise damaged tape, the TBC Function does not work correctly (it may repeatedly turn on and off). In this case, cancel the TBC Function.

DNR (Digital Noise Reduction) Function

- To reduce noise in the picture during playback, set [DNR] on the [PLAYBACK FUNCTIONS] Sub-Menu to [ON].
- This function can only be used when the TBC Function is activated (the [TBC] Indication is displayed).
- When the Playback Zoom Function, Multi Image Mode, Picture-in-Picture Mode, Mix Mode and Wipe Mode (→ 138, 152) is used with the Movie Camera in the VCR Mode, the Digital Noise Reduction Function does not work.
- If the playback picture or the subject's movements look unnatural, set [DNR] to [OFF].
- When you want to copy or edit scenes from this Movie Camera onto a VCR, set [DNR] to [OFF].



中文

在錄影機上放影時 (使用附帶的磁帶轉接器)

使用附帶的磁帶轉接器時，便可在您的錄影機上，用與全尺寸錄影帶相同的方法，播放小型錄影帶。

- 1 向上按電池盒蓋，並將其取下。
- 2 插入附帶的電池，然後重新裝上電池盒蓋。
- 3 依箭頭方向，滑動開啟桿。
- 4 插入已錄好的錄影帶，關閉頂蓋。
- 5 將磁帶轉接器插到錄影機內。
- 6 開始錄影機的放影操作。

使用之後，請從磁帶轉接器中取出錄影帶。

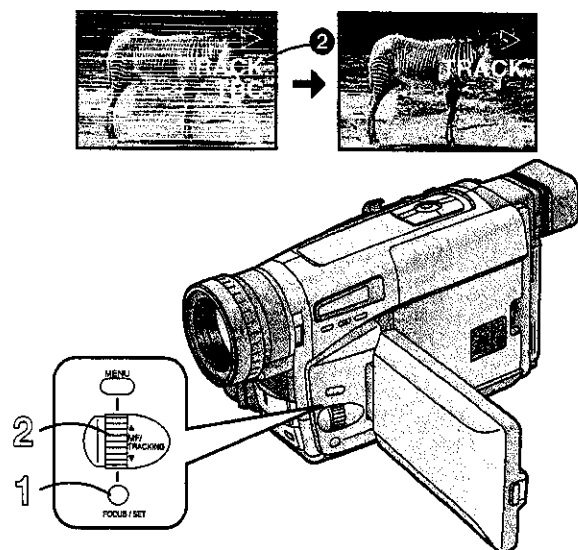
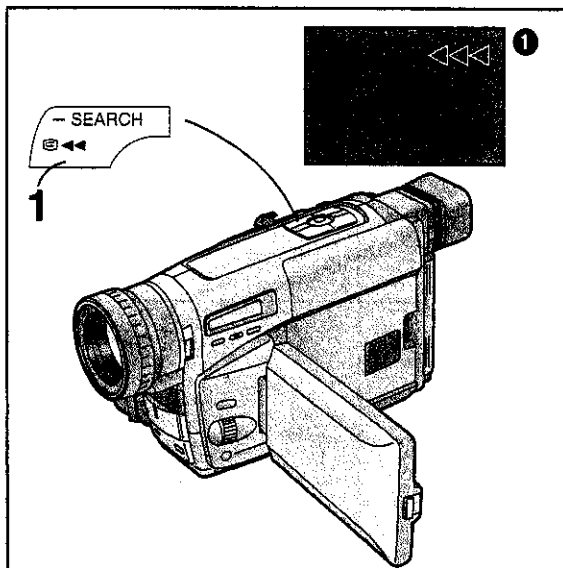
ENGLISH

Playing Back on a VCR (Using the Supplied Cassette Adaptor)

By using the supplied Cassette Adaptor, you can play back compact cassettes in your VCR in the same way as full-size cassettes.

- 1 Push the Battery Compartment Cover upward and remove it.
- 2 Insert the supplied battery and then re-attach the Battery Compartment Cover.
- 3 Slide the Open Lever in the direction of the arrow.
- 4 Insert the recorded cassette and close the Top Cover.
- 5 Insert the Cassette Adaptor into the VCR.
- 6 Start playback on the VCR.

After use, take out the cassette from the Cassette Adaptor.



中文

高速倒帶

- 1 在停止狀態下持續按[<<<]鈕1秒鐘以上。
 - 將出現[<<<]指示①。
 - 在進行高速倒帶時，倒磁帶的聲音會比較大。
 - 當磁帶倒至開頭部分時，攝錄影機將自動從高速倒帶狀態切換至倒帶狀態，倒帶倒至接近開頭部分時，將切換至停止狀態。
 - 當使用遙控器時，持續按[<<<]鈕3秒鐘以上。
 - 通過微電腦來操作本攝錄影機時(→ 162)，將無法使用該功能。
 - 在高速倒帶中，磁帶計數器將顯示[0:00.00]。

消除畫面的失真(手動磁跡調節)

本攝錄影機將自動對磁跡進行調節。但是，對於某些錄影帶，磁跡調節可能會不十分精確。在這種情況下，請手動調節磁跡。

- 1 在進行播放時輕按一下[FOCUS/SET](聚焦/設定)鈕。
 - 將出現[TRACK.]指示②。
- 2 轉動[TRACKING](磁跡)環，調節磁跡。
 - 連續5秒鐘未轉動[TRACKING]環時，磁跡調節功能將自動取消。
 - 有可能無法完全消除雜波條紋。
 - 在顯示菜單時，不能進行磁跡調節。
 - 如果您在進行磁跡調節後取出錄影帶，所做的調節設定將被取消。

回到自動磁跡調節狀態

在播放時持續按[FOCUS/SET]鈕2秒鐘以上。

ENGLISH

High-Speed Rewinding

- 1 Press the [<<<] Button for more than 1 second in the Stop Mode.
 - The [<<<] Indication ① appears.
 - During High-Speed Rewinding, the tape winding sound is louder.
 - When rewinding the tape to the beginning, the Movie Camera automatically changes over from the High-Speed Rewinding Mode to the Rewinding Mode near the beginning of the tape, and it switches over to the Stop Mode at the beginning of the tape.
 - When using the Remote Controller, press the [<<<] Button for more than 3 seconds.
 - If you operate this Movie Camera from a computer (→ 162), it is not possible to use this function.
 - During High-Speed Rewinding, the Tape Counter shows [0:00.00].

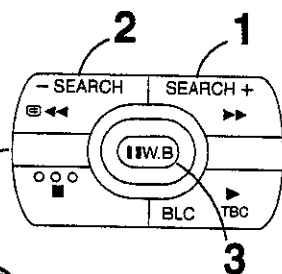
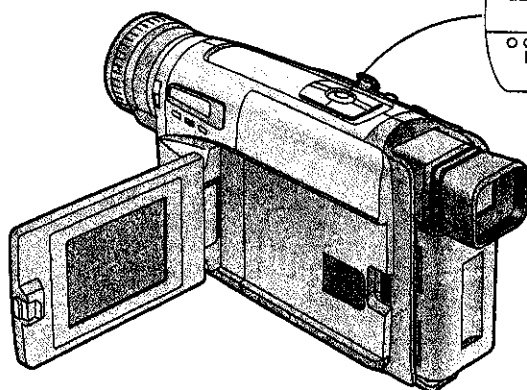
Eliminating Picture Distortions (Manual Tracking Adjustment)

This Movie Camera adjusts the tracking automatically. With certain cassettes, however, the tracking adjustment may not be precise. In this case, adjust the tracking manually.

- 1 Press the [FOCUS/SET] Button briefly during playback.
 - The [TRACK.] Indication ② appears.
- 2 Turn the [TRACKING] Dial to adjust the tracking.
 - The Tracking Adjustment Function is automatically cancelled when the [TRACKING] Dial is not turned for 5 seconds.
 - It may not be possible to remove the noise bars completely.
 - It is not possible to adjust the tracking when a menu is displayed.
 - If you eject the cassette after adjusting the tracking, the adjusted setting is cancelled.

Returning to the Auto Tracking Mode

Press the [FOCUS/SET] Button for more than 2 seconds during playback.



中文

快速尋影放影時

1 在普通放影狀態下，持續按住[▶▶]鈕。

倒帶尋影放影時

2 在普通放影狀態下，持續按住[◀◀]鈕。

尋影鎖定功能

進行較長的快速尋影或倒帶尋影時，只能短暫地按快速尋影[▶▶]鈕或倒帶尋影[◀◀]鈕。由於這樣做會鎖定尋影功能，所以不必要長時間地按鈕。

- 恢復普通放影時，請按放影[▶]鈕。

靜止放影時

3 在普通放影狀態下，按[||]鈕。

恢復普通放影時

再次按[||]鈕。

- 在快速尋影、倒帶尋影以及靜止放影狀態下，畫面中會出現水平雜波條紋 ❶，或者畫面變為黑白、失真。
- 液晶顯示監視器上再生的畫面，此電子尋像器中的畫面雜波少得多。然而，在電視機上播放時，畫面雜波將與電子尋像器相同。
- 在 SP 模式和 LP 模式下，水平雜波條紋的形式是不同的。
- 在快速尋影或倒帶尋影中在液晶顯示監視器上，將不會出現指示。
- 如果攝錄影機處於靜止放影狀態超過 6 分鐘時，它將自動切換為停止狀態。而且，如果攝錄影機是由電池供電時，再過 6 分鐘後，它將完全關閉。

ENGLISH

Cue Playback

1 Keep the [▶▶] Button pressed during normal playback.

Review Playback

2 Keep the [◀◀] Button pressed during normal playback.

Search Lock Function

For longer Cue or Review Playback, press the Cue Button [▶▶] or the Review Button [◀◀] only briefly. As this locks the search function, you do not need to keep the button pressed for a long time.

- To resume normal playback, press the [▶] Button.

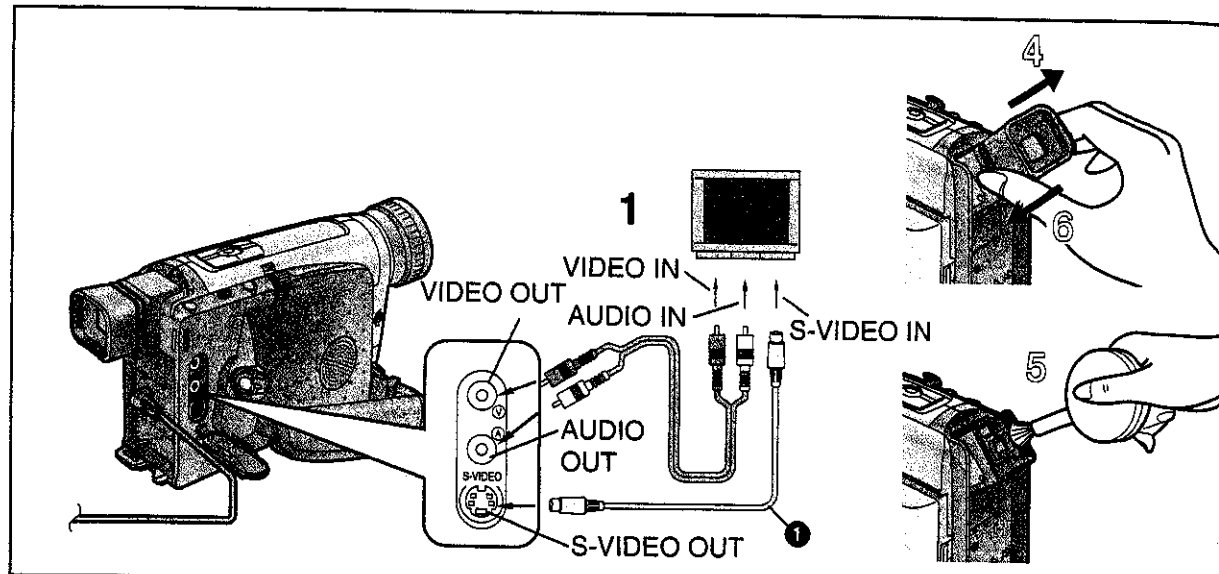
Still Playback

3 Press the [||] Button during normal playback.

Resuming Normal Playback

Press the [||] Button again.

- In the Cue, Review and Still Playback Modes, horizontal noise bars ❶ appear in the picture, or the picture may become black and white or distorted.
- The picture reproduced on the LCD Monitor contains less noise than the picture in the Finder. During playback on a TV, however, the picture noise is the same as in the Finder.
- The horizontal noise bars have a different pattern in the SP Mode and LP Mode.
- During Cue or Review Playback, no indications are displayed on the LCD Monitor.
- If you leave the Movie Camera in the Still Playback Mode for approximately 6 minutes, it automatically switches over to the Stop Mode. And, if the Movie Camera is being powered by the Battery, it switches off completely after a further 6 minutes.



中文

在電視機上觀看放影時

將攝錄影機連接至電視機時，便可在電視屏幕上觀看拍攝場景的放影。

連接之前，為安全起見，請關閉攝錄影機和電視機的電源。

1 用音頻 / 影像纜線（附件），將攝錄影機連接至電視機。

- 如果您的電視機具備S影像插孔時，也可連接S影像纜線**1**（附件）。

使用以後

- 1** 取出錄影帶。（→ 40）
- 2** 將[CAMERA/OFF/VCR]開關設置在[OFF]。
- 3** 拔掉交流轉接器或取出電池。

電子尋像器清潔

若電子尋像器中已經進入了灰塵時...

- 4** 按電子尋像器兩邊的鈕，依箭頭所示，將其取下。
- 5** 用吹氣刷（非附件）清除灰塵。
 - 如果您用棉籤或類似之物，來清潔電子尋像器內部時，須特別小心，以免劃傷電子尋像器的內部屏幕。
- 6** 重新安裝電子尋像器時，將其向前推入電子尋像器套筒，直至咔嚓一聲將其鎖定。

液晶顯示監視器清潔

請用軟布或吹氣刷清潔液晶顯示監視器。

攝錄影機機殼清潔

請用軟布擦拭。

鏡頭清潔

請用軟布或吹氣刷清潔鏡頭。

ENGLISH

Watching Playback on a TV

By connecting the Movie Camera to a TV, you can watch playback of the recorded scenes on the TV screen. Before connecting, turn off both the Movie Camera and the TV for safety's sake.

1 Use the AV Cable (supplied) to connect the Movie Camera with the TV.

- If your TV is equipped with an S-Video Socket, also connect the S-Video Cable **1** (supplied).

After Use

- 1** Take out the cassette. (→ 40)
- 2** Set the [CAMERA/OFF/VCR] Switch to [OFF].
- 3** Disconnect the AC Adaptor or remove the Battery.

Cleaning the Finder

If dust has entered the Finder...

- 4** Push the Buttons on both sides of the Finder and remove it in the direction of the arrow.
- 5** Remove dust with a blower brush (not supplied).
 - If you use a cotton swab or similar to clean the inside of the Finder, use it very carefully to prevent scratching the screen inside the Finder.
- 6** To re-attach the Finder, push it forward onto the Finder Tube until it locks with a click.

Cleaning the LCD Monitor

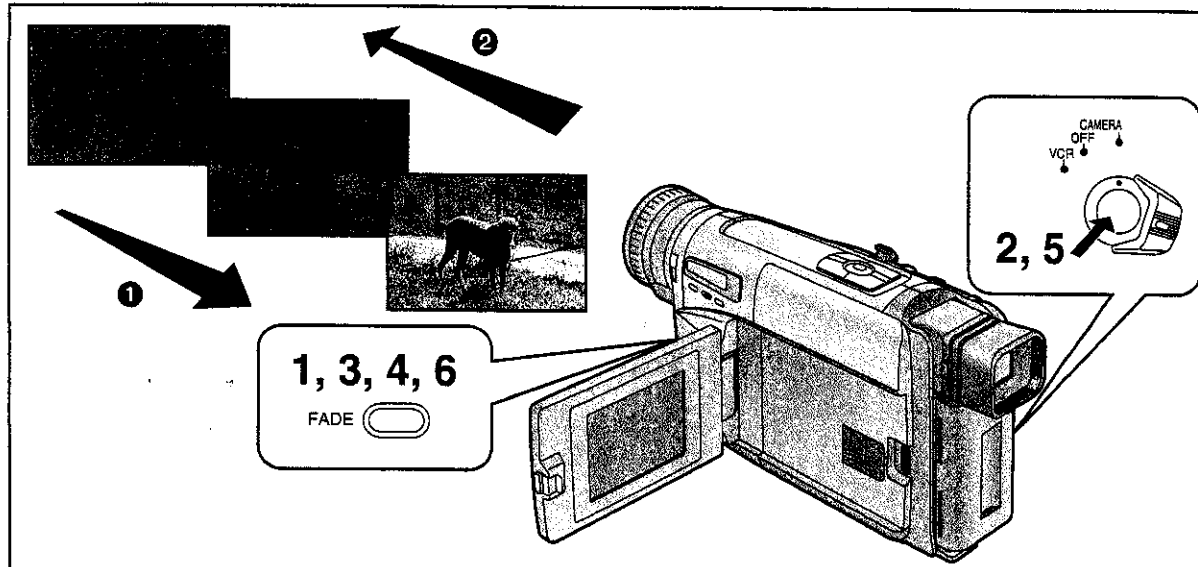
Clean the LCD Monitor with a soft cloth or a blower brush.

Cleaning the Movie Camera Body

Wipe it with a soft cloth.

Cleaning the Lens

Clean the lens with a soft cloth or a blower brush.



中文

淡入/淡出

■ 淡入 ①

淡入可讓您在拍攝的開頭，使畫面(和聲音)逐漸出現。

- 1 在攝錄影機處於拍攝暫停狀態下，按住[FADE](淡化)鈕。
- 2 當畫面完全消失後，按拍攝開始/停止鈕，開始拍攝。
- 3 約3-4秒鐘，然後鬆開[FADE]鈕。

■ 淡出 ②

淡出可讓您在拍攝的結尾，使畫面(和聲音)逐漸消失。

- 4 在拍攝中，按住[FADE]鈕。
- 5 當畫面完全消失後，按拍攝開始/停止鈕，停止拍攝。
- 6 鬆開[FADE]鈕。

• 在多畫面狀態或畫中畫狀態中，不能進行普通的淡入/淡出。

ENGLISH

Fading In/Out

■ Fading In ①

Fading in lets you make the picture (and sound) appear gradually at the beginning of a recording.

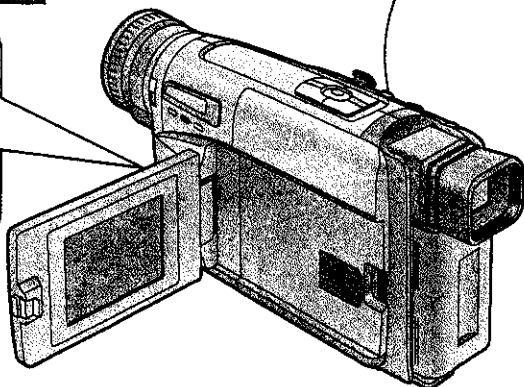
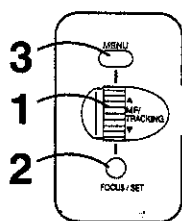
- 1 With the Movie Camera in the Recording Pause Mode, keep the [FADE] Button pressed.
- 2 When the picture has completely disappeared, press the Recording Start/Stop Button to start recording.
- 3 Approximately 3-4 seconds later, release the [FADE] Button.

■ Fading Out ②

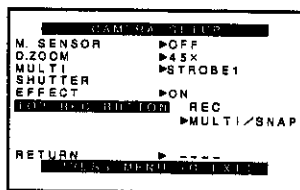
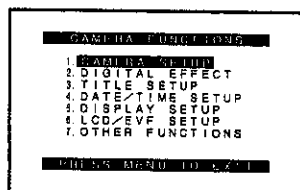
Fading out lets you make the picture (and sound) disappear gradually at the end of a recording.

- 4 During recording, keep the [FADE] Button pressed.
- 5 After the picture has completely disappeared, press the Recording Start/Stop Button to stop recording.
- 6 Release the [FADE] Button.

• In the Multi Image Mode and Picture-in-Picture Mode, normal fading in/out is not possible.



4 REC
MULTI/
SNAP



中文

拍攝靜止畫面時 (抓拍錄影)

按下单個該鈕，便可拍攝約 7 秒鐘的帶有配音的靜止畫面。例如，您想在自己的影像中拍攝招牌、地圖之類的清晰、穩定的靜止畫面等時，該功能非常便利。

- 由於靜止畫面是從數位畫面記憶器中錄製的，故畫質將略微低於正常錄製的畫面。
- 為了防止畫面變形，在拍攝靜止畫面中，請勿移動或抖動攝影機。

在顯示出[CAMERA SETUP](攝像設定)子菜單後... (→ 28)

- 1 轉動[▲▼]環，選擇[TOP REC BUTTON](頂部拍攝鈕)。
- 2 按[SET](設定)鈕，選擇[MULTI/SNAP]。
- 3 按[MENU]鈕，退出菜單。
- 4 在拍攝暫停狀態下，按[SNAP]鈕。
 - 畫面將保持靜止，且將出現[SNAP]指示。
 - 將錄製約 7 秒鐘的靜止畫面。

快門效果狀態

如果您將[CAMERA SETUP](攝像設定)子菜單上的[SHUTTER EFFECT](快門效果)設定在[ON]，當按[SNAP]鈕時，屏幕將如同 SLR 照相機一樣，短暫閃爍一下。該視覺快門效果也將被錄下來。

- 反復使用抓拍功能時，請在又一次按[SNAP]鈕之前，至少等待 3-4 秒鐘。
- 抓拍狀態不能與混合、划變、多畫面或畫中畫狀態結合使用。(→ 90、92、94、96)

ENGLISH

Recording a Still Picture (Snapshot Recording)

You can record a still picture together with sound for approximately 7 seconds at the press of a button. This is convenient for example for recording sharp, stable still pictures of signboards, maps, etc. in your videos.

- Since the still picture is recorded from the digital image memory, the picture quality is slightly inferior to that of normally recorded pictures.
- To prevent picture distortion, do not move or shake the Movie Camera during still picture recording.

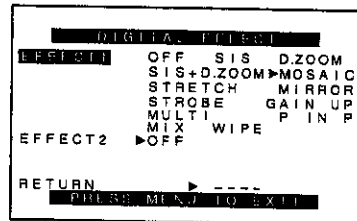
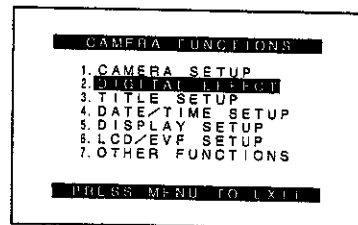
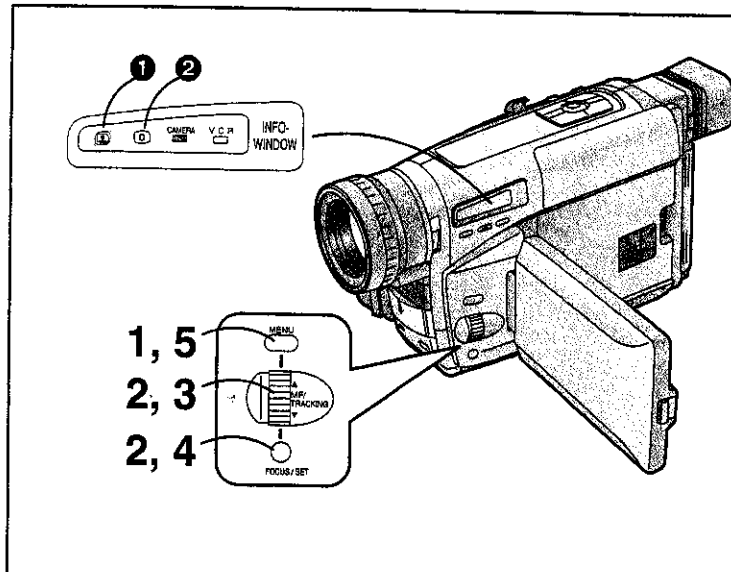
After displaying the [CAMERA SETUP] Sub-Menu... (→ 28)

- 1 Turn the [▲▼] Dial to select [TOP REC BUTTON].
- 2 Press the [SET] Button to select [MULTI/SNAP].
- 3 Press the [MENU] Button to exit the menu.
- 4 Press the [SNAP] Button in the Recording Pause Mode.
 - The image stands still and the [SNAP] Indication appears.
 - The still picture is recorded for approximately 7 seconds.

Shutter Effect Mode

If you set [SHUTTER EFFECT] on the [CAMERA SETUP] Sub-Menu to [ON], the screen blinks briefly like an SLR photo camera when you press the [SNAP] Button. This visual shutter effect is also recorded.

- When using the Snapshot Function repeatedly, wait at least 3-4 seconds before pressing the [SNAP] Button again.
- It is not possible to use the Snapshot Mode together with the Mix, Wipe, Multi Image, or Picture-in-Picture Mode. (→ 90, 92, 94, 96)



中文

使用特殊效果(數位效果)

除超級畫面穩定和數位變焦之外，該攝錄影機還可為您提供多種不同的數位效果狀態，使其能夠以創造性手段，簡單地為您的場景增光添彩。

選擇需要的數位效果

- 1 按[MENU](菜單)鈕。
● 將顯示[CAMERA FUNCTIONS](攝像功能)主菜單。
- 2 轉動[▲▼]環，選擇[DIGITAL EFFECT](數碼功能)，然後按[SET](設定)鈕。
● 將顯示[DIGITAL EFFECT](數碼功能)子菜單。
- 3 轉動[▲▼]環，選擇[EFFECT1](功能1)或[EFFECT2](功能2)。
- 4 按[SET]鈕，選擇需要的數位效果。
● 當您選擇超級畫面穩定狀態時(→ 86)，[LAMP 1]燈 ① 將亮起。當您選擇其他任何數位效果時，[LAMP 2]燈 ② 將亮起。
- 5 按[MENU]鈕，退出菜單。

- 如果您將[CAMERA/OFF/VCR]開關設置在[OFF]，然後再次將其設置在[CAMERA]，您所選擇的數位效果的指示將閃爍幾秒鐘，向您報告當前所選擇的設定。
- 如果您將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT2]設置在[B/W](黑白狀態)或[SEPIA](棕色狀態)，則無法手動調節白色平衡。(→ 106)
- 在多畫面狀態、畫中畫狀態、混合狀態和划變狀態中，不能使用任何數位淡化狀態。
- 抓拍狀態不能與混合、划變、多畫面或畫中畫狀態結合使用。(→ 90, 92, 94, 96)
- 在多畫面狀態或畫中畫狀態中，不能進行普通的淡入/淡出。
- 當使用微電腦連接套件，將攝錄影機的數位靜音端子連接至微電腦時(→ 162)，將無法使用多畫面、畫中畫、混合及划變狀態。

取消數位效果時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]或[EFFECT2]設置在[OFF]。

ENGLISH

Using Special Effects (Digital Effects)

In addition to the Super Image Stabilizer and Digital Zoom, this Movie Camera offers you various digital effect modes to make it easy to enhance your scenes in many creative ways.

Selecting a Desired Digital Effect

- 1 Press the [MENU] Button.
● The [CAMERA FUNCTIONS] Main-Menu appears.
- 2 Turn the [▲▼] Dial to select [DIGITAL EFFECT] and then press the [SET] Button.
● The [DIGITAL EFFECT] Sub-Menu appears.
- 3 Turn the [▲▼] Dial to select [EFFECT1] or [EFFECT2].
- 4 Press the [SET] Button to select the desired digital effect.
● When you select the Super Image Stabilizer Mode (→ 86), the [LAMP 1] lights. When you select any other digital effect, the [LAMP 2] lights.
- 5 Press the [MENU] Button to exit the menu.

- If you set the [CAMERA/OFF/VCR] Switch to [OFF] and then set it to [CAMERA] again, the indication of the selected digital effect flashes for a few seconds to inform you of the selected setting.
- If you have set [EFFECT2] on the [DIGITAL EFFECT] Sub-Menu to [B/W] or [SEPIA], it is not possible to manually adjust the white balance. (→ 106)
- In the Multi Image Mode, Picture-in-Picture Mode, Mix Mode and Wipe Mode, it is not possible to use any of the Digital Fade Modes.
- It is not possible to use the Snapshot Mode together with the Mix, Wipe, Multi Image or Picture-in-Picture Mode. (→ 90, 92, 94, 96)
- In the Multi Image Mode and Picture-in-Picture Mode, normal fading in/out is not possible.
- When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), the Multi Image, Picture-in-Picture, Mix and Wipe Modes cannot be used.

Cancelling the Digital Effect

Set [EFFECT1] or [EFFECT2] on the [DIGITAL EFFECT] Sub-Menu to [OFF].



中文

數位效果 1 [EFFECT1]

- 1 超級畫面穩定狀態 [] (→ 86)
當您進行遠距離攝影或在行走的汽車內拍攝時，該效果可防止畫面晃動。
- 2 數位變焦狀態 [D.ZOOM] (→ 88)
該效能可將目標物放大得遠遠超過光學變焦範圍之外。
- 3 超級畫面穩定和數位變焦狀態 [/D.ZOOM]
該結合狀態可以進行特遠距離攝影，並可防止畫面晃動。
- 4 馬賽克狀態 [MOSAIC]
畫面將變得如同馬賽克一般。
- 5 加寬狀態 [STRETCH]
畫面被水平加寬，而其高度仍保持不變。
- 6 鏡面狀態 [MIRROR]
畫面的右半邊為左半邊的鏡面圖像。
- 7 頻閃狀態 [STROBE]
畫面具有頻閃一般的效果。
 - 由於頻閃畫面是從數位畫面記憶體中錄製的，故畫質將略微低於正常錄製的畫面。
 - 當在熒光燈之下進行拍攝時，畫面亮度可能會不穩。
- 8 超高靈敏度狀態 [GAIN UP]
該功能會電子性地增加圖像的亮度。該狀態中，請手動調節聚焦。
 - 超高靈敏度狀態不能與運動狀態或素描特寫狀態配合使用。
 - 用超高靈敏度功能拍攝時，可能會發生殘留圖像失真。
 - 使用超高靈敏度狀態時，不能手動調節白色平衡或取消手動調節的白色平衡設定值。
 - 使用超高靈敏度狀態時，即使出現了[AUTO](自動)指示，也只能手動調節聚焦。

ENGLISH

Digital Effects 1 [EFFECT1]

- 1 Super Image Stabilizer Mode [] (→ 86)
This prevents shaky pictures when recording in the tele range or from a moving vehicle.
- 2 Digital Zoom Mode [D.ZOOM] (→ 88)
It enlarges the subject beyond the optical zooming range.
- 3 Super Image Stabilizer and Digital Zoom Mode [/D.ZOOM]
This combination mode allows recording in the extreme tele range and prevents shaky pictures.
- 4 Mosaic Mode [MOSAIC]
The picture becomes mosaic-like.
- 5 Stretch Mode [STRETCH]
The picture is stretched horizontally while its height remains unchanged.
- 6 Mirror Mode [MIRROR]
The right half of the picture is a mirror image of the left half.
- 7 Strobe Mode [STROBE]
The picture has a stroboscope-like effect.
 - Since the strobe pictures are recorded from the digital image memory, the picture quality is slightly inferior to that of normally recorded pictures.
 - When recording under fluorescent lamps, the brightness of the picture may fluctuate.
- 8 Gain-up Mode [GAIN UP]
It electronically brightens up the picture. In this mode adjust the focus manually.
 - It is not possible to use the Gain-up Mode together with the Sports Mode or the Portrait Mode.
 - Some after-image distortion may occur during recording with the Gain-up Function.
 - When the Gain-up Mode is used, it is not possible to manually adjust the white balance or to cancel the manually adjusted white balance setting.
 - When the Gain-up Mode is used, the focus can only be adjusted manually even if the [AUTO] Indication is displayed.

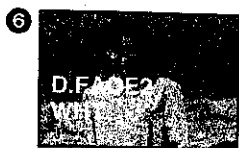


中 文

- ⑨ **多畫面狀態 [MULTI] (→ 90, 92)**
 屏幕被分割為9幅靜止場畫面。
- ⑩ **畫中畫狀態 [P IN P] (→ 94)**
 將在正常畫面中插入和顯示一幅小靜止畫面。
- ⑪ **混合狀態 [MIX] (→ 96)**
 該功能將在新場景畫面的淡入中，使以前的圖像逐漸淡出。
- ⑫ **划變狀態 [WIPE] (→ 96)**
 使用該功能，您可以像拉上窗簾一樣，從一個場景過渡到下一個場景。

ENGLISH

- ⑨ **Multi Image Mode [MULTI] (→ 90, 92)**
 The screen is divided into 9 small still fields.
- ⑩ **Picture-in-Picture Mode [P IN P] (→ 94)**
 A small still picture is inserted and displayed inside the normal picture.
- ⑪ **Mix Mode [MIX] (→ 96)**
 It gradually fades out one scene while fading in the new scene over it.
- ⑫ **Wipe Mode [WIPE] (→ 96)**
 With this function, you can change over from one scene to the next like drawing a curtain.



中文

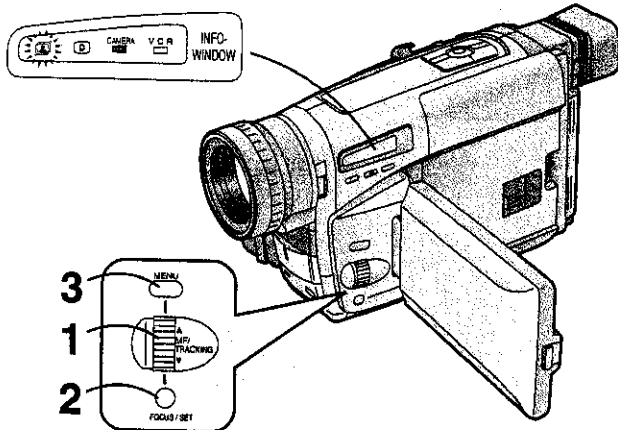
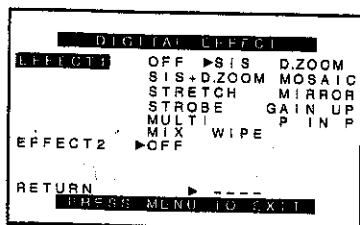
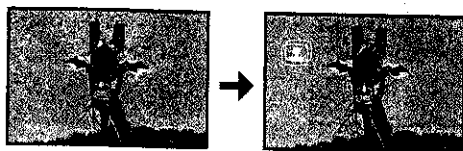
數位效果 2 [EFFECT2]

- 1 負片狀態[NEGA]
圖像色彩顛倒，如同照片的底片一樣。
- 2 曝光過久狀態[SOLARI]
以繪畫一般的效果拍攝圖像。
- 3 棕色狀態[SEPIA]
用棕色調拍攝場景，類似舊照片的色彩。
- 4 黑白狀態[B/W]
將以黑白兩色拍攝圖像。
- 5 數位淡化狀態 1[D.FADE1](→ 98)
淡入時，畫面從中心出現，向邊緣擴展。淡出時正相反，從邊緣開始。
- 6 數位淡化狀態 2[D.FADE2](→ 98)
畫面以點狀似冰融雪落般淡入，淡出。
- 7 數位淡化狀態 3[D.FADE3](→ 98)
畫面以划變效果淡入或淡出。

ENGLISH

Digital Effects 2 [EFFECT2]

- 1 **Negative Mode [NEGA]**
The picture has reversed colours similar to photographic negatives.
- 2 **Solarisation Mode [SOLARI]**
The picture has an effect similar to a painting.
- 3 **Sepia Mode [SEPIA]**
Scenes have a brown tint similar to the colour of old photographs.
- 4 **Black & White Mode [B/W]**
The picture is in black and white.
- 5 **Digital Fade 1 Mode [D.FADE1] (→ 98)**
The picture fades in starting at the centre and extending toward the edges and fades out in reverse direction.
- 6 **Digital Fade 2 Mode [D.FADE2] (→ 98)**
The picture fades in and fades out in small dots similar to snow melting or falling.
- 7 **Digital Fade 3 Mode [D.FADE3] (→ 98)**
The picture fades in with a wipe effect and fades out.



中文

怎樣使用超級畫面穩定功能

在攝錄影機容易發生晃動，如您拉近遙遠的目標物或在行走進行攝影中等狀況下強行拍攝時，可利用該功能來穩定圖像。

- 當攝錄影機晃動非常嚴重時，有可能無法穩定畫面。

在顯示出[DIGITAL EFFECT](數碼功能)子菜單後... (→ 78)

- 1 轉動[▲▼]環，選擇[EFFECT1](功能1)。
- 2 按[SET](設定)鈕，選擇[SIS]或[SIS+D.ZOOM]。
 - [SIS]和/或[D.ZOOM]燈亮起。
- 3 按[MENU]鈕，退出菜單。
 - 將出現[SIS]和/或[D.ZOOM]指示。

取消超級畫面穩定功能時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]設置在[OFF]。

■ 下列拍攝情況下，畫面穩定效果可能會不夠好：

- 具有水平和垂直條紋的目標物
- 平淡的目標物
- 黑暗的目標物(在此情況下，[SIS]指示將閃爍。請增加光亮。)
- 在大量熒光燈下的目標物
- 在熒光燈下，畫面亮度可能會起伏不定，色彩也可能不自然。發生此現象是因為快門速度也已得到調節。

ENGLISH

Using the Super Image Stabilizer Function

In recording situations where shaking of the Movie Camera is likely to happen, for example when you have zoomed in on a distant subject or when you record while walking, you can use this function to stabilize the image.

- In case of very strong camera shake, it may not be possible to stabilize the picture.

After displaying the [DIGITAL EFFECT] Sub-Menu... (→ 78)

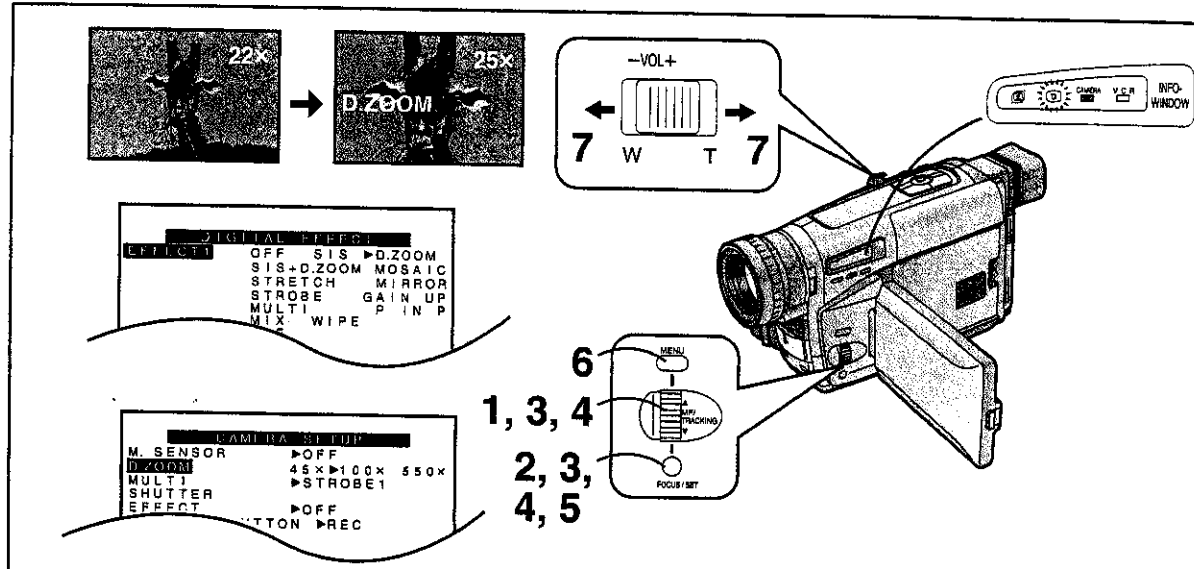
- 1 Turn the [▲▼] Dial to select [EFFECT1].
- 2 Press the [SET] Button to select [SIS] or [SIS+D.ZOOM].
 - The [SIS] and/or [D.ZOOM] Lamp lights.
- 3 Press the [MENU] Button to exit the menu.
 - The [SIS] and/or [D.ZOOM] Indication appear.

Canceling the Super Image Stabilizer Function

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

■ In the Following Recording Conditions, the Picture Stabilizing Effect May Not Be Sufficient:

- Subjects with horizontal or vertical stripes
- Flat subjects
- Dark subjects (In this case, the [SIS] Indication flashes. Increase the amount of light.)
- Subjects under many fluorescent lamps
- Under fluorescent lamps, the picture brightness may fluctuate and the colours may be unnatural. This happens because the shutter speed has been adjusted as well.



中文

怎樣使用數位變焦功能

本機的普通(光學)變焦功能可以提供1×至22×的變焦放大倍率範圍。當您拍攝非常遙遠的目標物時，如果您希望將圖像放大得比普通變焦能得到的倍率更大時，使用本功能將非常便利。對於數位變焦功能，您可在最多至45×、最多至100×和最多至550×放大之間進行選擇。

在顯示出[DIGITAL EFFECT](數碼功能)子菜單後... (→ 78)

- 1 轉動[▲▼]環，選擇[EFFECT1](功能1)。
- 2 按[SET](設定)鈕，選擇[D.ZOOM]或[SIS+D.ZOOM]。
• [D]和/或[Q]燈亮起。
- 3 轉動[▲▼]環，選擇[RETURN](返回)，然後按[SET]鈕，選擇[YES](是)。
• 將顯示[CAMERA FUNCTIONS]主菜單。
- 4 在[CAMERA SETUP](攝像設定)子菜單上選擇[D.ZOOM](數位變焦)。(→ 28)
- 5 按[SET]鈕，選擇需要的數位變焦範圍(高達45×，高達100×或高達550×)。
- 6 按[MENU]鈕，退出菜單。
• [D.ZOOM]和/或[Q]指示將出現。
- 7 根據需要朝[T]或[W]方向，按[W/T]變焦桿，進行拉近或拉遠。
• 使用數位變焦功能時，畫質將有所降低。
• 在數位變焦範圍(23×~550×)之內，不能手動調節白色平衡或取消手動調節的白色平衡設定值。

取消數位變焦功能時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]設置在[OFF]。

ENGLISH

Using the Digital Zoom Function

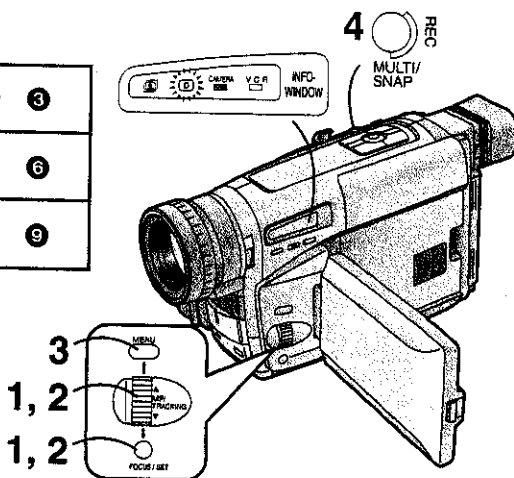
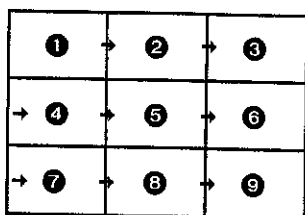
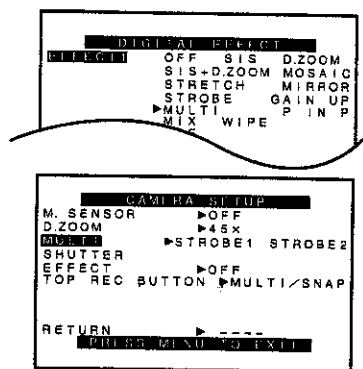
This function is convenient when you want to enlarge a very distant subject even more than is possible with the normal (optical) zoom which offers a magnification range of 1×–22×. For the Digital Zoom Function, you can choose between up to 45×, up to 100× and up to 550× magnification.

After displaying the [DIGITAL EFFECT] Sub-Menu... (→ 78)

- 1 Turn the [▲▼] Dial to select [EFFECT1].
- 2 Press the [SET] Button to select [D.ZOOM] or [SIS+D.ZOOM].
• The [D] and/or [Q] Lamp lights.
- 3 Turn the [▲▼] Dial to select [RETURN] and then press the [SET] Button to select [YES].
• The [CAMERA FUNCTIONS] Main-Menu appears.
- 4 Select [D.ZOOM] on the [CAMERA SETUP] Sub-Menu. (→ 28)
- 5 Press the [SET] Button to select the desired digital zoom range (up to 45×, up to 100× or up to 550×).
- 6 Press the [MENU] Button to exit the menu.
• The [D.ZOOM] and/or [Q] indication appear.
- 7 Push the [W/T] Zoom Lever toward [T] or [W] zoom in or out as desired.
• When using the Digital Zoom Function, the picture quality is somewhat reduced.
• Within the digital zoom range (23×–550×), it is not possible to adjust the white balance manually or to cancel the manually adjusted white balance setting.

Cancelling the Digital Zoom Function

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].



中文

在屏幕上顯示9幅小靜止畫面(多畫面)

■ 捕捉和顯示一系列9幅靜止畫面(多畫面頻閃1狀態)
該功能可捕捉和顯示約1.5秒鐘的一系列9幅靜止畫面。該功能特別適合於體育動作或動物研究等的運動分析。

在將[DIGITAL EFFECT](數碼功能)子菜單中的[EFFECT1](功能1)設定為[MULTI]，並在顯示出[CAMERA SETUP](攝像設定)子菜單之後... (→ 28)

● [LAMP]燈會亮起。

- 1 轉動[▲▼]環，選擇[MULTI]，然後按[SET](設定)鈕，選擇[STROBE1]。
- 2 轉動[▲▼]環，選擇[TOP REC BUTTON](頂部拍攝鈕)，然後按[SET]鈕，選擇[MULTI/SNAP]。
- 3 按[MENU]鈕，退出菜單。
● 將出現[MULTI]指示。
- 4 在您打算捕捉一系列9幅靜止畫面的場景處，按[MULTI]鈕。
● 將出現一系列9幅靜止畫面。

抹消9幅靜止畫面時

按[MULTI]鈕。

如果再次按[MULTI]鈕時，將捕捉和顯示另外的一系列9幅靜止畫面。

取消多畫面狀態時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]設置在[OFF]。

- 如果您在拍攝中按了[MULTI]鈕，也可能會錄下少量的雜訊。
- 在多畫面狀態下拍攝的圖像質量將稍有下降。
- 棕色或黑白狀態不能用於顯示9幅靜止畫面(即使這些指示可能已出現)。

ENGLISH

Displaying 9 Small Still Pictures on the Screen (Multi Image)

■ Capturing and Displaying a Sequence of 9 Still Pictures (Multi Image Strobe 1 Mode)

This function captures and displays a sequence of 9 still pictures over approximately 1.5 seconds. This is very convenient for motion analysis of sports action, animal studies, etc.

After setting [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [MULTI] and then displaying the [CAMERA SETUP] Sub-Menu... (→ 28)

● The [LAMP] Lamp lights.

- 1 Turn the [▲▼] Dial to select [MULTI] and then press the [SET] Button to select [STROBE1].
- 2 Turn the [▲▼] Dial to select [TOP REC BUTTON] and then press the [SET] Button to select [MULTI/SNAP].
- 3 Press the [MENU] Button to exit the menu.
● The [MULTI] Indication appears.
- 4 Press the [MULTI] Button at the scene that you want to capture as a sequence of 9 still pictures.
● A sequence of 9 still pictures appears.

Erasing the 9 Still Pictures

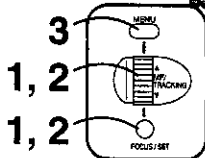
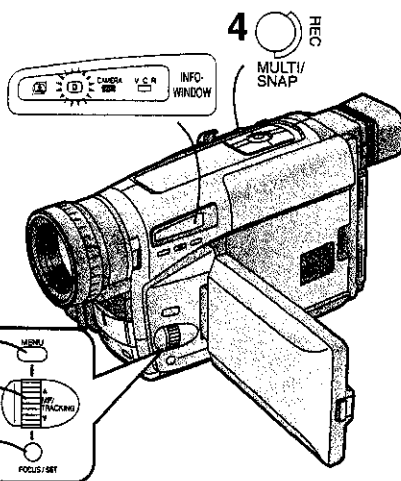
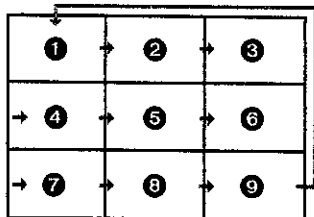
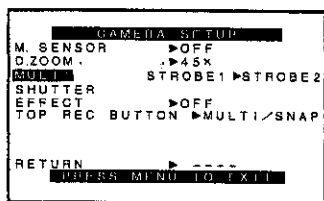
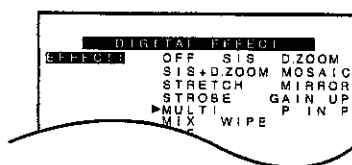
Press the [MULTI] Button.

If you press the [MULTI] Button again, another sequence of 9 still pictures is captured and displayed.

Cancelling the Multi Image Mode

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

- If you press the [MULTI] Button during recording, a small noise may also be recorded.
- The quality of the pictures recorded in the Multi-Picture Mode is slightly inferior.
- The Sepia or Black & White Modes cannot be used for the displayed 9 still pictures (even though these indications may appear).



中文

■ 連續捕捉和顯示 9 幅靜止畫面 (多畫面頻閃 2 狀態)
該功能可連續捕捉和顯示各約 1.5 秒鐘的一系列 9 幅靜止畫面。

在將 [DIGITAL EFFECT] (數碼功能) 子菜單中的 [EFFECT1] (功能 1) 設定為 [MULTI]，並在顯示出 [CAMERA SETUP] (攝像設定) 子菜單之後... (→ 28)

• [D] 燈會亮起。

- 1 轉動 [▲▼] 環，選擇 [MULTI]，然後按 [SET] (設定) 鈕，選擇 [STROBE2]。
- 2 轉動 [▲▼] 環，選擇 [TOP REC BUTTON] (頂部拍攝鈕)，然後按 [SET] 鈕，選擇 [MULTI/SNAP]。
- 3 按 [MENU] 鈕，退出菜單。
• 將出現 [MULTI] 指示。
- 4 在您打算開始使用多畫面頻閃 2 功能之處，按 [MULTI] 鈕。
• 將連續出現一系列 9 幅靜止畫面，直至您再次按 [MULTI] 鈕為止。

抹消 9 幅靜止畫面時

按 [MULTI] 鈕，停止捕捉和顯示一系列 9 幅畫面後，再按 [MULTI] 鈕。
如果又按 [MULTI] 鈕時，將重新開始捕捉和顯示一系列 9 幅畫面。

取消多畫面狀態時

將 [DIGITAL EFFECT] (數碼功能) 子菜單上的 [EFFECT1] 設置在 [OFF]。

- 如果您在拍攝中按了 [MULTI] 鈕，也可能會錄下少量的雜訊。
- 在多畫面狀態下拍攝的圖像質量將稍有下降。
- 棕色或黑白狀態不能用於顯示 9 幅靜止畫面 (即使這些指示可能已出現)。

ENGLISH

■ Continuously Capturing and Displaying 9 Still Pictures (Multi Image Strobe 2 Mode)

This function continuously captures and displays sequences of 9 still pictures taken over approximately 1.5 seconds each.

After setting [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [MULTI] and then displaying the [CAMERA SETUP] Sub-Menu... (→ 28)

• The [D] Lamp lights.

- 1 Turn the [▲▼] Dial to select [MULTI] and then press the [SET] Button to select [STROBE2].
- 2 Turn the [▲▼] Dial to select [TOP REC BUTTON] and then press the [SET] Button to select [MULTI/SNAP].
- 3 Press the [MENU] Button to exit the menu.
• The [MULTI] Indication appears.
- 4 Press the [MULTI] Button at the scene that you want the Multi Image Strobe 2 Function to start.
• Sequences of 9 still pictures are continuously displayed until you press the [MULTI] Button again.

Erasing the 9 Still Pictures

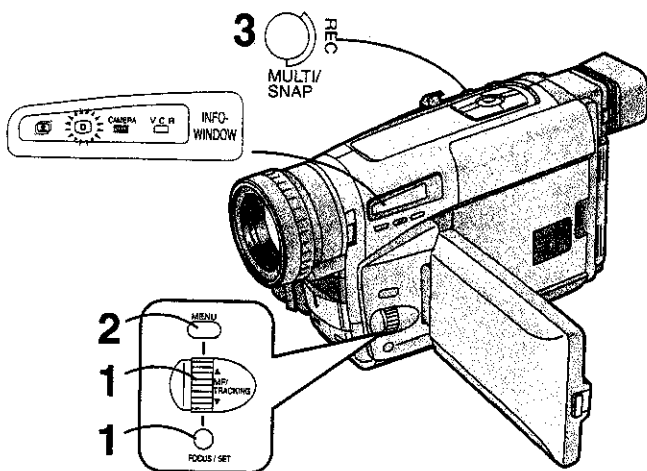
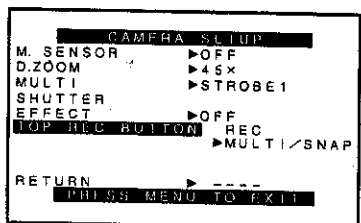
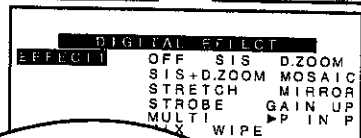
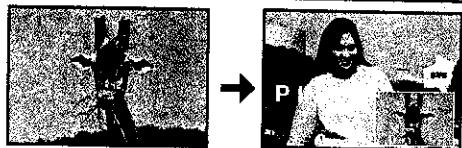
After pressing the [MULTI] Button to stop the capturing and displaying of sequences of 9 pictures, press the [MULTI] Button again.

If you press the [MULTI] Button once more, the capturing and displaying of sequences of 9 pictures starts again.

Cancelling the Multi Image Mode

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

- If you press the [MULTI] Button during recording, a small noise may also be recorded.
- The quality of the pictures recorded in the Multi-Picture Mode is slightly inferior.
- The Sepia or Black & White Modes cannot be used for the displayed 9 still pictures (even though these indications may appear).



中文

在普通畫面中顯示一幅小靜止畫面(畫中畫)

該功能可讓您在普通畫面中顯示一幅小的靜止畫面。您可在拍攝和拍攝暫停狀態下，使用該功能。

在將[DIGITAL EFFECT](數碼功能)子菜單中的[EFFECT1](功能1)設定為[P IN P]，並在顯示出[CAMERA SETUP](攝像設定)子菜單之後... (→ 28)

- [D]燈會亮起。

1 轉動[▲▼]環，選擇[TOP REC BUTTON]，然後按[SET](設定)鈕，選擇[MULTI/SNAP]。

2 按[MENU]鈕，退出菜單。

- 將出現[P IN P]指示。

3 將攝錄影機瞄準您打算將其作為一幅小靜止畫面而捕捉的場景或目標物，然後按[MULTI](多畫面)鈕。

- 普通畫面中將插入一幅小畫面。

抹消一幅小畫面時

按[MULTI]鈕。

如果再次按[MULTI]鈕時，將顯示另一幅小畫面。

取消畫中畫狀態時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]設置在[OFF]。

- 與正常移動畫面相比，小畫面所錄製的畫質將稍有不及。
- 如果您在拍攝中按了[MULTI]鈕，也可能會錄下少量的雜訊。
- 當顯示一幅小靜止畫面時，雖然可以顯示棕色狀態和黑白狀態的指示，但是無法對該一幅小畫面使用棕色狀態或黑白狀態。

ENGLISH

Displaying a Small Still Picture Inside the Normal Picture (Picture-in-Picture)

This function lets you display a small still picture inside the normal picture. You can use this function in the Recording and Recording Pause Modes.

After setting [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [P IN P] and then displaying the [CAMERA SETUP] Sub-Menu... (→ 28)

- The [D] Lamp lights.

1 Turn the [▲▼] Dial to select [TOP REC BUTTON] and then press the [SET] Button to select [MULTI/SNAP].

2 Press the [MENU] Button to exit the menu.

- The [P IN P] Indication appears.

3 Aim the Movie Camera at the scene or subject that you want to capture as a small still picture and press the [MULTI] Button.

- A small picture appears inside the normal picture.

Erasing the Small Picture

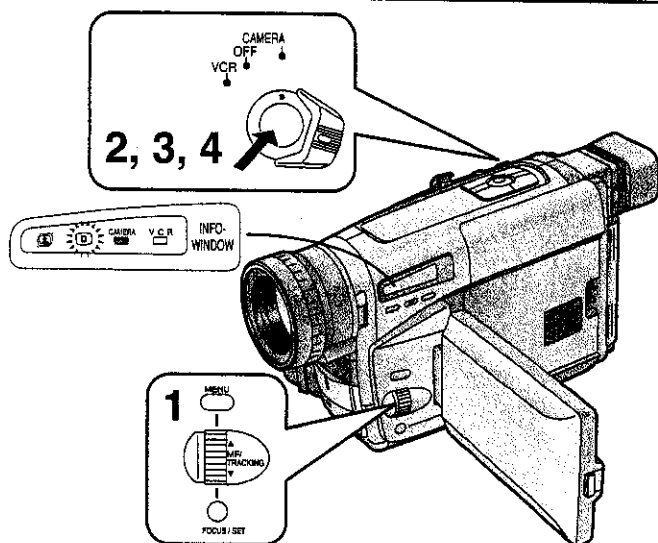
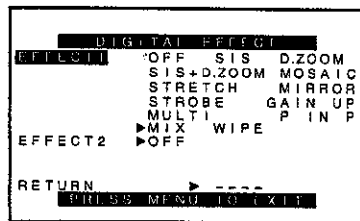
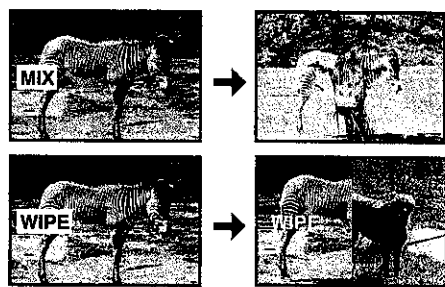
Press the [MULTI] Button.

If you press the [MULTI] Button again, another small picture is displayed.

Cancelling the Picture-in-Picture Mode

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

- The small picture is recorded with slightly inferior picture quality compared to that of normal moving pictures.
- If you press the [MULTI] Button during recording, a small noise may also be recorded.
- When a small still picture is displayed, it is not possible to apply the Sepia or Black & White Mode to the small picture, although their indications might appear.



中文

混合功能和划變功能

混合功能：

該功能將在新場景圖像的淡入中，使以前拍攝的最後圖像逐漸淡出。

划變功能：

該功能將用新場景的移動畫面，逐漸取代上次所錄場景的靜止畫面，像打開幕布一般。

- 1 將[DIGITAL EFFECT](數碼功能)子菜單中的項目[EFFECT1](功能1)設定為[WIPE](划變)或[MIX](混合)。(→ 78)
 - [D]燈會亮起。
 - 將出現[WIPE]或[MIX]指示。
- 2 按拍攝開始/停止鈕，開始普通拍攝。
- 3 按拍攝開始/停止鈕，停止拍攝場景。
 - 最後一幅圖像將被保存在記憶中。
 - [WIPE]或[MIX]指示將變為[WIPE]或[MIX]。
- 4 按拍攝開始/停止鈕，再次開始拍攝。
 - 前一個場景的最後一幅圖像將逐漸被新的場景所取代。

取消混合或划變功能時

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT1]設置在[OFF]。

- 直至您取消了混合或划變功能為止，將一直用該混合或划變功能記錄隨後的所有場景至場景的過渡。
- 負片和曝光過久效果不能應用於儲存在混合或划變功能所用的數位圖像記憶中的圖像。

ENGLISH

Mix Function and Wipe Function

Mix Function:

It gradually fades out a still picture of the last recorded scene while fading in the moving picture of the new scene.

Wipe Function:

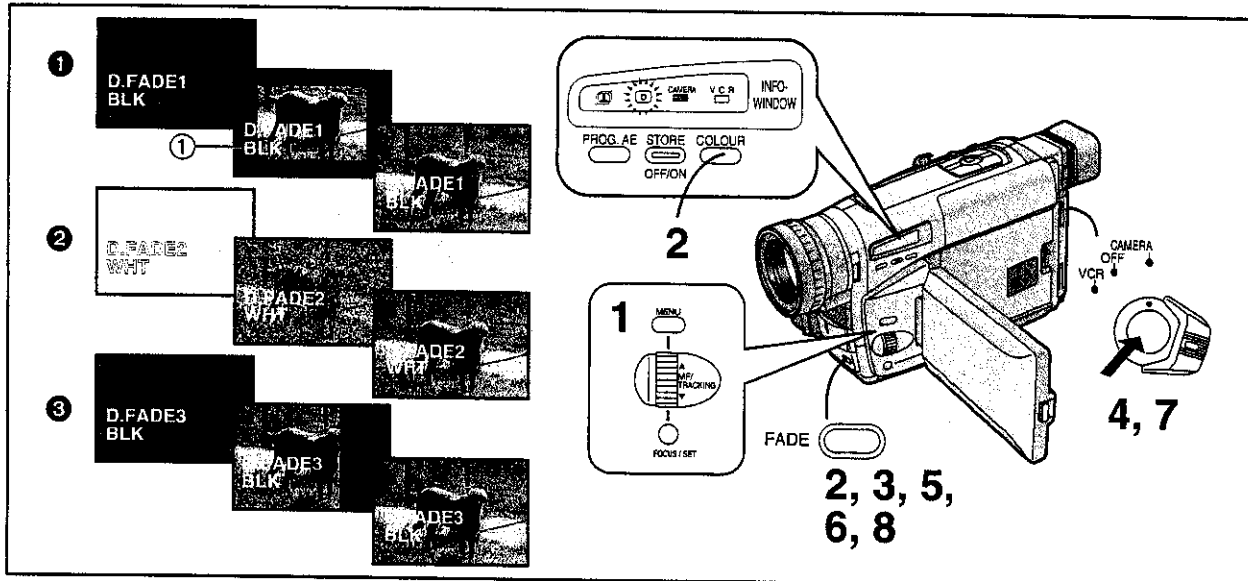
It gradually replaces a still picture of the last recorded scene with the moving picture of the new scene, like drawing a curtain.

- 1 Set [WIPE] or [MIX] from [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu. (→ 78)
 - The [D] Lamp lights.
 - The [WIPE] or [MIX] Indication appears.
- 2 Press the Recording Start/Stop Button to start recording normally.
- 3 Press the Recording Start/Stop Button to stop recording the scene.
 - The last picture is stored in memory.
 - The [WIPE] or [MIX] Indication changes to [WIPE] or [MIX].
- 4 Press the Recording Start/Stop Button to start recording the next scene.
 - The last picture of the previous scene is gradually replaced by the new scene.

Cancelling the Mix or Wipe Function

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

- All subsequent scene-to-scene transitions will be recorded with this Mix or Wipe Effect until you cancel the Mix or Wipe Function.
- The Negative and Solarisation Effects cannot be applied to a picture stored in the digital image memory for the Mix or Wipe Function.



中文

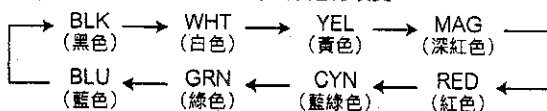
數位淡化功能

有3種數位淡化狀態可供選擇。

- ① 數位淡化 1 [D.FADE1]
- ② 數位淡化 2 [D.FADE2]
- ③ 數位淡化 3 [D.FADE3]

- 1 將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT2](功能2)設定為[D.FADE1](數位淡化1)、[D.FADE2](數位淡化2)或[D.FADE3](數位淡化3)。(→78)
- [D]燈亮起。

- 2 一邊按住[FADE](淡化)鈕，一邊重複按[COLOUR](色彩)鈕，直至出現所需要的色彩①。
- 數位淡化用色彩將依下列順序進行改變：



■ 淡入

- 3 在攝錄影機處於拍攝暫停狀態時，持續按住[FADE]鈕。
- 畫面將以選擇的數位淡化效果逐漸消失。
- 4 當畫面完全消失後，按拍攝開始/停止鈕，開始拍攝。
- 5 約3-4秒鐘，然後鬆開[FADE]鈕。

■ 淡出

- 6 在拍攝中，請持續按住[FADE]鈕。
- 7 當畫面完全消失後，按拍攝開始/停止鈕，停止拍攝。
- 8 鬆開[FADE]鈕。

取消所選擇的數位淡化功能

將[DIGITAL EFFECT](數碼功能)子菜單上的[EFFECT2]設置在[OFF]。

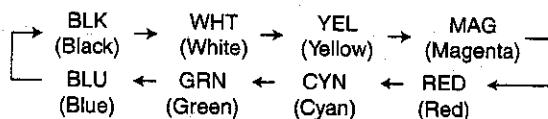
ENGLISH

Digital Fade

There are 3 Digital Fade Modes available.

- ① Digital Fade 1 [D.FADE1]
- ② Digital Fade 2 [D.FADE2]
- ③ Digital Fade 3 [D.FADE3]

- 1 Set [EFFECT2] on the [DIGITAL EFFECT] Sub-Menu to [D.FADE1], [D.FADE2] or [D.FADE3]. (→78)
- The [D] Lamp lights.
- 2 While keeping the [FADE] Button pressed, repeatedly press the [COLOUR] Button until the desired colour ① is displayed.
- The colours of the Digital Fade change in the following order:



■ Fading In

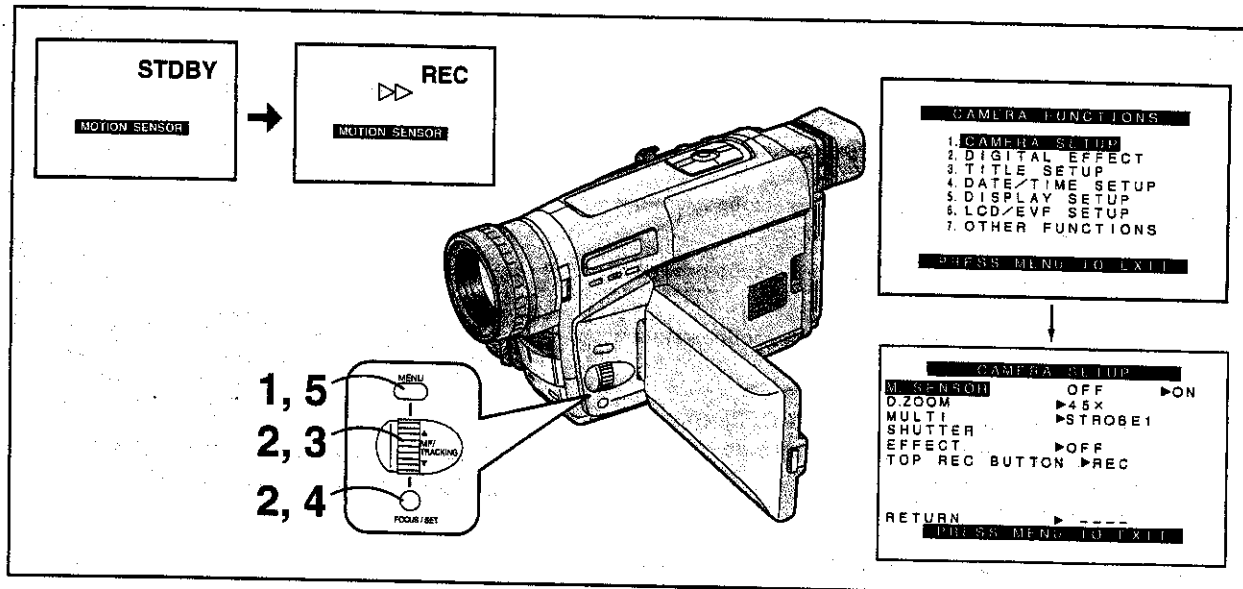
- 3 With the Movie Camera In the Recording Pause Mode, keep the [FADE] Button pressed.
- The picture disappears gradually with the selected digital fade effect.
- 4 When the picture has completely disappeared, press the Recording Start/Stop Button to start recording.
- 5 Approximately 3-4 seconds later, release the [FADE] Button.

■ Fading Out

- 6 During recording, keep the [FADE] Button pressed.
- 7 After the picture has completely disappeared, press the Recording Start/Stop Button to stop recording.
- 8 Release the [FADE] Button.

Cancelling the Selected Digital Fade Function

Set [EFFECT2] on the [DIGITAL EFFECT] Sub-Menu to [OFF].



中文

移動感應器控制拍攝

在該狀態下，當內藏移動感應器探測到畫面有某些移動時，會自動開始拍攝。

- 1 按[MENU]鈕。
 - 將顯示[CAMERA FUNCTIONS](攝像功能)主菜單。
 - 2 轉動[▲▼]環，選擇[CAMERA SETUP](攝像設定)，然後按[SET]鈕。
 - 將顯示[CAMERA SETUP](攝像設定)子菜單。
 - 3 轉動[▲▼]環，選擇[M.SENSOR]。
 - 4 按[SET]鈕，選擇[ON]。
 - 5 按[MENU]鈕，退出菜單。
 - 將出現移動感應器功能待命[STDBY]指示。
- 在攝錄影機的移動感應器探測到畫面中的移動後約1秒鐘，會自動開始拍攝。待畫面中的移動停止約10秒鐘之後，將自動停止拍攝，且攝錄影機會處於移動感應器待命狀態。
 - 當攝錄影機處於移動感應器待命狀態下超過6分鐘時，電子尋像器或液晶顯示監視器將關閉。當移動感應器再次探測到畫面中的變化時，將在約4秒鐘之後重新開始自動拍攝，同時電子尋像器或液晶顯示監視器打開。

在待命狀態下取消移動感應器功能時

將[CAMERA SETUP](攝像設定)子菜單上的[M.SENSOR]設置在[OFF]。

在拍攝中取消移動感應器功能時

按住拍攝開始/停止鈕約2秒鐘。

ENGLISH

Motion-Sensor-Controlled Recording

In this mode, recording automatically starts when the built-in Motion Sensor detects some movement in the picture.

- 1 Press the [MENU] Button.
 - The [CAMERA FUNCTIONS] Main-Menu appears.
 - 2 Turn the [▲▼] Dial to select [CAMERA SETUP] and then press the [SET] Button.
 - The [CAMERA SETUP] Sub-Menu appears.
 - 3 Turn the [▲▼] Dial to select [M.SENSOR].
 - 4 Press the [SET] Button to select [ON].
 - 5 Press the [MENU] Button to exit the menu.
 - The Motion Sensor Stand-by [STDBY] Indication appears.
- Approximately 1 second after the Movie Camera's Motion Sensor has detected movement in the picture, recording automatically starts. Approximately 10 seconds after movement in the picture has stopped, recording automatically stops and the Movie Camera is in the Motion Sensor Function Stand-by Mode.
 - When the Movie Camera remains in the Motion Sensor Function Stand-by Mode for more than 6 minutes, the Finder or LCD Monitor turns off. When the Motion Sensor again detects movement in the picture, recording automatically restarts after approximately 4 seconds, and the Finder or LCD Monitor turns on.

Cancelling the Motion Sensor Function During Stand-by Set [M.SENSOR] on the [CAMERA SETUP] Sub-Menu to [OFF].

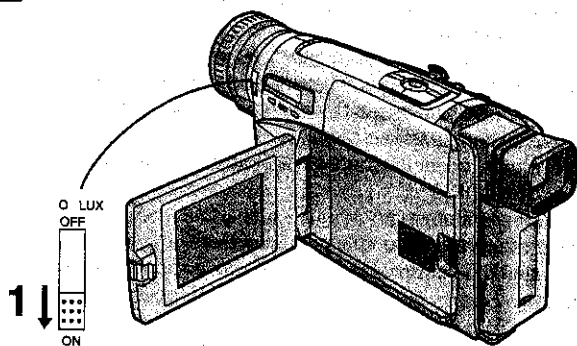
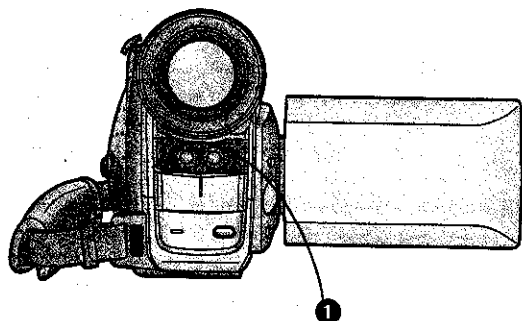
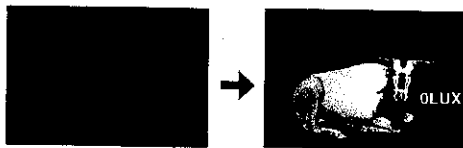
Cancelling the Motion Sensor Function During Recording Press the Recording Start/Stop Button for approximately 2 seconds.

■ 在下列拍攝狀況下，移動感應器可能無法正常工作：

- 目標物後面為白色牆面或其他單色背景時。
- 淡入時，畫面從中心出現向邊緣擴展。
- 環境亮度發生突然變化時。
- 攝錄影機的曝光稍微撞擊或振動時。
- 目標物移動得太慢或太快時。
- 目標物的移動距離很短。
- 在暗光之處拍攝時。([MOTION SENSOR] 指示閃爍。)
- 目標物非常小時。
- 目標物的移動靠近畫面邊緣時。
- 背景中有水平或垂直條紋時。
- 為了防止因攝錄影機移動而引起的意外拍攝，應該將攝錄影機安裝在三角架或者將其擱置於非常穩定的位置。
- 當 [CAMERA SETUP] (攝像設定) 子菜單中的 [M.SENSOR] (移動感應器) 項被設定在 [ON] (開) 時，雖然您可以在 [DIGITAL EFFECT] (數碼功能) 子菜單中選擇數位效果，但是移動感應器功能具有優先權，所選擇的數位效果將被自動取消。
- 當 [CAMERA SETUP] (攝像設定) 子菜單上的 [M.SENSOR] 被設定在 [ON] 時，將無法用按拍攝開始/停止鈕的方法手動開始拍攝，也不能啟動拍攝檢查或攝錄影機尋影功能。
- 當您用交流轉接器為攝錄影機供電時，若未探測到畫面移動時，即使拍攝中錄影帶已經到達結尾，移動感應器功能待命狀態仍將繼續下去。當用電池為攝錄影機供電時，直至電池放電為止，將一直保持移動感應器功能待命狀態，到那時，[CAMERA] 燈會閃爍幾秒鐘。
- 為確保移動感應器能夠正常地工作，畫面的目標物應足夠大。因此，當您將鏡頭變焦到最大廣角位置時，鏡頭與目標物之間的距離最好在2米以內。對於遠距離的目標物，須將其相應的拉近。
- 開始拍攝之前，攝錄影機需要一定的時間進行設定。所以，移動的開頭部分將拍攝不到。
- 如果發生了停電時，移動感應器功能將被取消。

■ In the Following Recording Situations, the Motion Sensor May Not Work Correctly:

- A white wall or another single-colour background behind subject.
- A subject with horizontal, vertical or oblique stripes.
- Sudden changes in the surrounding brightness.
- Exposure of the Movie Camera to slight shocks or vibrations.
- Extremely slow or fast movement of the subject.
- Very little movement of the subject.
- Recording in a dimly lit place. (The [MOTION SENSOR] Indication flashes.)
- A very small subject.
- Movement of the subject near the edge of the picture.
- A background with horizontal or vertical stripes.
- To prevent accidental recording start caused by Movie Camera movement, the Movie Camera should be mounted on a tripod or be otherwise secured in a very stable position.
- Although you can select a digital effect on the [DIGITAL EFFECT] Sub-Menu when [M.SENSOR] on the [CAMERA SETUP] Sub-Menu is set to [ON], the Motion Sensor Function has priority and the selected digital effect is automatically cancelled.
- When [M.SENSOR] on the [CAMERA SETUP] Sub-Menu is set to [ON], it is not possible to manually start recording by pressing the Recording Start/Stop Button or to activate the Recording Check or Camera Search Function.
- When you use the AC Adaptor to power the Movie Camera, the Motion Sensor Function Stand-by Mode will continue when no movement is detected in the picture, even when the tape has reached the end during recording. When you use the Battery to power the Movie Camera, it remains in the Motion Sensor Function Stand-by Mode until the Battery is discharged, at which time the [CAMERA] Lamp flashes for a few seconds.
- To ensure correct functioning of the Motion Sensor Function, the moving subject should be quite large in the picture. Therefore, when you have zoomed the lens to the maximum wide-angle position, the distance between lens and subject should preferably be within about 2 metres. For subjects at larger distances, be sure to zoom in accordingly.
- The Movie Camera requires time to set up before recording starts. Therefore, the beginning of movement is not recorded.
- If there is a power interruption, the Motion Sensor Function is cancelled.



中文

在無任何照明的暗處進行拍攝時 (0 Lux 夜景功能)

當您打算在夜晚無任何照明之處進行攝影，如觀察夜間活動的動物等時，該功能非常便利。在此狀態下，攝錄影機將發射紅外線，以便拍攝無法用肉眼看見的目標物。

1 將[0 LUX OFF/ON]開關設置在[ON]，使[0LUX]指示出現。

- 內藏紅外線光束發射器 ① 會亮起。拍攝時，小心勿讓您的手指擋住了發射器。
- 勿光照明亮之處使用 0 Lux 夜景功能，也絕對勿將攝錄影機對準太陽，否則可能會造成不可挽回的損壞。
- 用 0 Lux 夜景功能所拍攝之場景的放影畫面，將是黑白的。
- 如果您在拍攝中改變了[0 LUX OFF/ON]開關的設定時，也可能會錄下切換雜訊。
- 用 0 Lux 夜景功能拍攝時，將無法手動調節白色平衡或取消手動調節的白色平衡設定值。
- 當 0 Lux 夜景功能啟動時，不能使用任何程序 AE 狀態。
- 使用 0 Lux 夜景功能時，目標物應該位於距攝錄影機 3 米之內。
- 當自動聚焦不精確時，請手動調節聚焦。
- 如果您在用 0 Lux 夜景功能拍攝中，不想要信號燈時，請將[OTHER FUNCTIONS](其他功能)子菜單上的[TALLY LAMP](信號燈)設置在[OFF]。
- 在 0 Lux 夜景狀態下，由於此時光圈完全開啟，被錄製的白色或其他顏色的目標物可能會顯得蒼白、模糊或缺乏對比度。
- 如果您將 0 Lux 夜景功能和移動感應器控制拍攝功能結合使用時，一旦攝錄影機內藏移動感應器探測到畫面中有些移動時，便會自動開始拍攝。這種功能結合非常便於在夜間進行簡易和行動不定的動物觀察。

取消 0 Lux 夜景功能時

將[0 LUX OFF/ON]開關設定在[OFF]，以使[0LUX]指示消失。

ENGLISH

Recording in Dark Places without Any Illumination (0 Lux Night View Function)

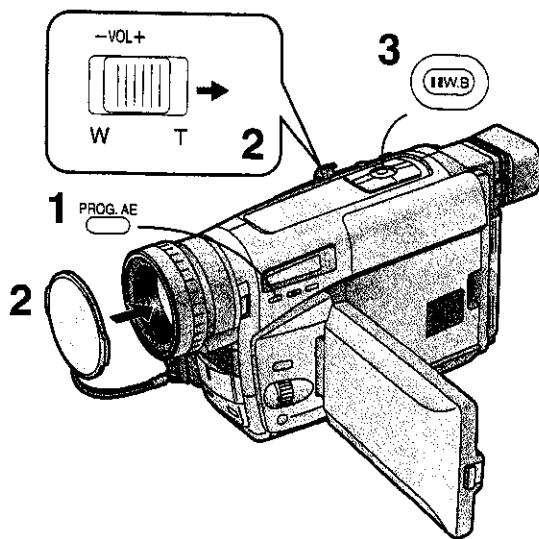
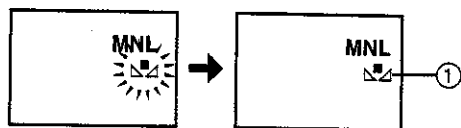
This function is convenient when you want to record at night in places without any illumination, for example for observing the behaviour of nocturnal animals, etc. In this mode, the Movie Camera emits infrared rays which makes it possible to record subjects that are invisible to the naked eye.

1 Set the [0 LUX OFF/ON] Switch to [ON] to make the [0LUX] Indication appear.

- The built-in Infra-red Beam Emitters ① light. Be careful not to cover them with your hand when recording.
- Do not use the 0 Lux Night View Function in brightly lit places and never aim the Movie Camera against the sun, as this could cause irreparable damage.
- The playback picture of scenes recorded with the 0 Lux Night View Function will be in black and white.
- If you change the setting of the [0 LUX OFF/ON] Switch during recording, a switching noise is also recorded.
- When recording with the 0 Lux Night View Function, it is not possible to adjust the white balance manually or to cancel the manually adjusted white balance setting.
- It is not possible to use any of the Programme AE Modes when the 0 Lux Night View Mode is activated.
- When using the 0 Lux Night View Function, the subject should be within 3 metres from the Movie Camera.
- When the automatic focusing is not precise, adjust the focus manually.
- If you do not want the Tally Lamp to light during recording using the 0 Lux Night View Function, set [TALLY LAMP] on the [OTHER FUNCTIONS] Sub-Menu to [OFF].
- As the iris is fully opened in the 0 Lux Night View Mode, subjects in white or other light colours may be recorded whitish, blurred and with weak contrast.
- If you use the 0 Lux Night View Function together with the Motion-Sensor-Controlled Recording Function, recording starts automatically when the Movie Camera's built-in Motion Sensor detects some movement in the picture. This combined function is convenient for easy, unattended animal observation recordings at night.

Cancelling the 0 Lux Night View Function

Set the [0 LUX OFF/ON] Switch to [OFF] to make the [0LUX] Indication disappear.



中文

用手動白色平衡調節進行拍攝時

使用該攝影機時，也可手動調節白色平衡。

該狀態可用不適合於全自動狀態的特殊目標物和拍攝條件，以及超出範圍 ① (→ 108) 之光源。當您想如專家一樣，對每個新場景，用手動進行白色平衡調節時，也可使用該功能。

- 1 連續按動[PROG. AE](程序AE)鈕，直至顯示出除[AUTO](自動)指示以外的指示為止。
- 2 裝上白色鏡頭蓋，並拉近，直至整個屏幕變為白色。
- 3 持續按住[W.B.](白色平衡)鈕，直至[]指示 ① 在電子尋像器中停止閃爍，並保持亮起為止。
 - 使用棕色狀態或黑白狀態、超高靈敏度或0 Lux夜景狀態時，不能手動調節白色平衡。而且，如果已經手動調節了白色平衡，即使按[W.B.]鈕，也無法將其取消。

在下述情況下，[]指示將閃爍：

- 在手動調節白色平衡過程中。(如果環境很暗，無法調節白色平衡時，[]指示將持續閃爍。)
- 當上一次設置的手動白色平衡設定被保持時。
- 當您試圖在數位變焦範圍內(23×-550×)調節白色平衡時。在此情況下，請先在光學變焦範圍內(1×-22×)調節白色平衡，然後再回到數位變焦狀態。

取消手動白色平衡狀態時

按一次[W.B.]鈕。或者，連續按動[PROG. AE]鈕，直至顯示出[AUTO]指示。

不適合於用全自動狀態拍攝的目標物和拍攝條件

- 有黑色表面的目標物
- 在拍攝中，將攝影機從室外移動到室內時
- 照明條件差別太大的目標物
- 由水銀蒸氣燈或鈉燈照明的目標物

ENGLISH

Recording with Manual White Balance Adjustment

With this Movie Camera, you can also adjust the white balance manually.

Use this mode for special subjects and recording conditions, for which the Full Auto Mode is not suitable, and for light sources outside the range ① (→ 108). Use it also when you want to manually adjust the white balance for each new scene as professionals do.

- 1 Press the [PROG. AE] Button repeatedly until an indication other than [AUTO] indication appears.
- 2 Attach the White Lens Cap and zoom in until the entire screen is white.
- 3 Keep the [W.B.] Button pressed until the [] Indication ① stops flashing and remains lit.
 - When the Sepia Mode, Black & White Mode, Gain-up Mode or 0 Lux Night View Mode is being used, it is not possible to manually adjust the white balance. Also, if the white balance was manually adjusted, it cannot be cancelled, even if you press the [W.B.] Button.

In the following cases, the [] Indication flashes:

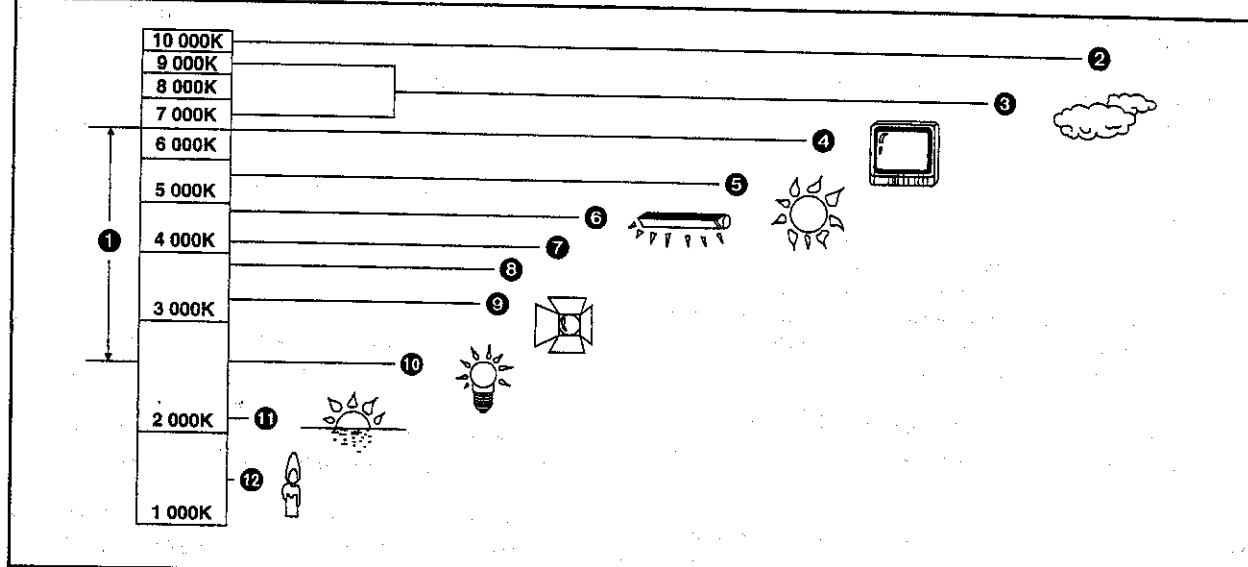
- During manual adjustment of the white balance. (If the surroundings are dark and the white balance cannot be adjusted, the [] Indication keeps flashing.)
- When the previously Manual White Balance Adjustment is maintained.
- When you are trying to adjust the white balance in the digital zoom range (23×-550×). In this case, first adjust the white balance in the optical zoom range (1×-22×) and then zoom back to within the Digital Zoom Mode.

Cancelling the Manual White Balance Mode

Press the [W.B.] Button once. Or, press the [PROG. AE] Button repeatedly until the [AUTO] Indication appears.

Subjects and Recording Conditions Not Suitable for Recording in the Full Auto Mode

- Subjects with dark surfaces
- When moving the Movie Camera from outdoors to indoors while recording
- Subjects lit by different light sources
- Subjects lit by mercury-vapour or sodium lamps



中文

色溫 and 白色平衡調節

每種光源都有其獨特的色溫，其值由開氏溫標(K)測量。開氏值越高，光越帶藍色；開氏值越低，光越泛紅色；開氏值與光源的色調有關，而與其亮度沒有直接關係。

上圖所示範圍①，表示用本攝錄影機可提供精確的白色平衡調節的光源。所以，當使用全自動狀態時，便可在攝製的畫面中獲得自然色彩。對於此範圍之外的光源，請手動調節白色平衡。(→ 106)而且，還可能需要增加光源。

- ① 本攝錄影機的自動白色平衡調節的控制範圍
- ② 藍天
- ③ 陰天(小雨)
- ④ 電視屏幕
- ⑤ 陽光
- ⑥ 白色熒光燈
- ⑦ 日出後或日落前的兩小時
- ⑧ 日出後或日落前的一小時
- ⑨ 鹵素燈
- ⑩ 白熾燈
- ⑪ 日出或日落
- ⑫ 燭光

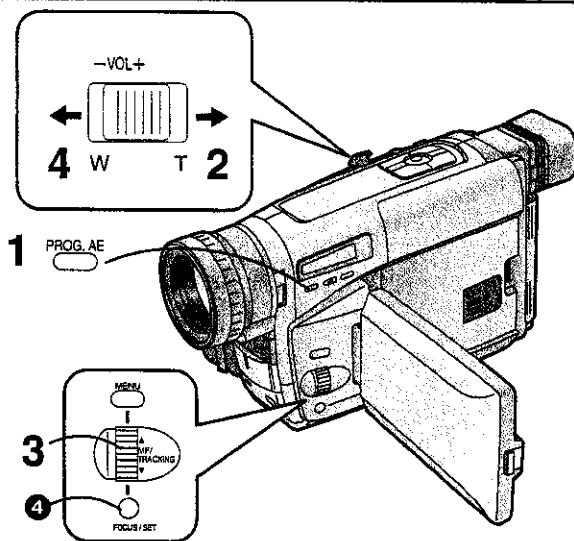
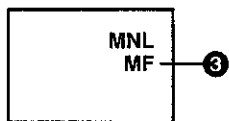
ENGLISH

Colour Temperature and White Balance Adjustment

Every light source has its own colour temperature measured in Kelvin (K). The higher the Kelvin value, the more bluish the light; the lower the value, the more reddish the light. The Kelvin value is related to the tint of the light, but not directly to its brightness.

The range ① indicated in the illustration above shows the light sources for which this Movie Camera can provide precise white balance adjustment and, therefore, natural colours in the recorded pictures, when using the Full Auto Mode. For light sources outside this range, adjust the white balance manually. (→ 106) Also, additional lighting may be necessary.

- ① Control range of this Movie Camera's Auto White Balance Adjustment Mode
- ② Blue sky
- ③ Cloudy sky (Rain)
- ④ TV screen
- ⑤ Sunlight
- ⑥ White fluorescent lamp
- ⑦ 2 hours after sunrise or before sunset
- ⑧ 1 hour after sunrise or before sunset
- ⑨ Halogen light bulb
- ⑩ Incandescent light bulb
- ⑪ Sunrise or sunset
- ⑫ Candlelight



中文

用手動聚焦調節進行拍攝時

對於無法精確地進行自動聚焦的目標物和拍攝條件，該功能可讓您手動調節聚焦。

- 1 連續按動[PROG. AE](程序AE)鈕，直至顯示出除[AUTO](自動)指示以外的指示為止。
- 2 將[W/T]變焦桿持續推向[T]，拉近目標物。
 - 調節聚焦之前，先拉近目標物，確保即使您以後拉遠時，目標物也能保持精確的聚焦。
- 3 轉動[MF]環，調節聚焦。
 - 會出現[MF]指示。
- 4 將[W/T]變焦桿持續推向[W]，根據需要進行拉遠。

取消手動聚焦狀態時

按一次[FOCUS](變焦)鈕，使[MF]指示消失。或者，連續按動[PROG. AE]鈕，直至顯示出[AUTO]指示。

不適合於用全自動狀態拍攝的目標物和拍攝條件

- 有黑色表面的目標物
- 有光澤或光線反射太強的目標物
- 反差太小的目標物
- 一部分靠近攝錄機而另一部分離得太遠的目標物
- 無垂直輪廓的目標物
- 快速移動的目標物
- 在移動物體後面的目標物
- 位於佈滿髒污、灰塵或水滴的玻璃後面的目標物

ENGLISH

Recording with Manual Focus Adjustment

This makes it possible to adjust the focus manually for subjects and recording situations for which automatic focusing is not precise.

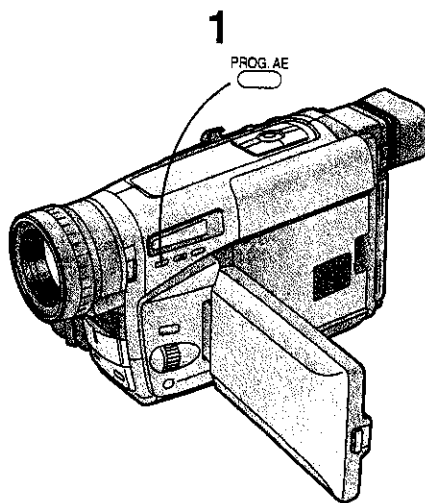
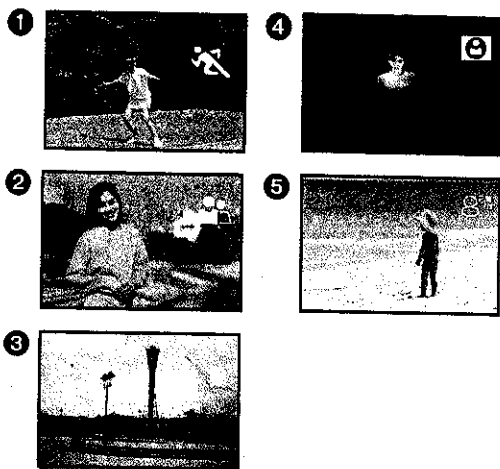
- 1 Press the [PROG. AE] Button repeatedly until an indication other than [AUTO] indication appears.
- 2 Keep the [W/T] Zoom Lever pushed toward [T] to zoom in on the subject.
 - Zooming in on the subject before adjusting the focus ensures that the subject remains precisely focused even when you later zoom out.
- 3 Turn the [MF] Dial to adjust the focus.
 - The [MF] Indication appears. ([MF] means Manual Focus.)
- 4 Push the [W/T] Zoom Lever toward [W] to zoom out as desired.

Cancelling the Manual Focus Mode

Press the [FOCUS] Button once to make the [MF] Indication disappear. Or, press the [PROG. AE] Button repeatedly until the [AUTO] Indication appears.

Subjects and Recording Conditions Not Suitable for Recording in the Full Auto Mode

- Subjects with dark surfaces
- Subjects with shiny surfaces or a lot of light reflection
- Subjects with weak contrast
- Subjects with part of it near and part of it far away from the Movie Camera
- Subjects without vertical contours
- Subjects with fast movement
- Subjects behind moving objects
- Subjects behind glass covered by dirt, dust or water drops



中文

在各種情況下拍攝 (程序AE)

該功能可讓您選擇最適合特殊拍攝狀況的自動曝光設定。

1 連續按動[PROG. AE](程序AE)鈕，直至顯示出所需要的狀態指示 ([], [], [], []或[])。

- 1 運動狀態 []**
可拍攝運動場景之類快速移動的目標物。
- 2 素描特寫狀態 []**
可使目標物明顯地突出於背景。
- 3 弱光狀態 []**
可將較暗的場景拍得更亮。
- 4 聚光燈狀態 []**
可拍攝聚光燈下的目標物(晚會、劇場等)。
- 5 碎浪和雪地狀態 []**
可拍攝亮背景中的目標物(雪地、海灘等)。

- 在拍攝中，即使您按下[PROG. AE]鈕，也不能改變拍攝狀態([AUTO](自動)、[MNL](手動)、[]、[]、[]、[]、[])。
- 0 Lux 夜景狀態啟動時，將無法使用任何程序AE狀態。

取消所選擇的程序AE功能

連續按動[PROG. AE]鈕，直至不顯示上述指示([]、[]、[]、[]、[])。

ENGLISH

Recording in Special Situations (Programme AE)

This function lets you select Automatic Exposure settings optimized for special recording situations.

1 Press the [PROG. AE] Button repeatedly until the indication of the desired mode ([, [, [, [] or []) appears.


- 1 Sports Mode []**
To record scenes with fast-moving subjects such as sports scenes.
- 2 Portrait Mode []**
To make subjects stand out sharply from the background.
- 3 Low Light Mode []**
To record dark scenes more brightly.
- 4 Spotlight Mode []**
To record subjects under spotlights (party, theatre, etc.).
- 5 Surf & Snow Mode []**
To record subjects in brightly lit surroundings (ski slopes, beach, etc.).

- During recording, it is not possible to change the recording mode ([AUTO], [MNL], [, [, [, [, []), even if you press the [PROG. AE] Button.
- It is not possible to use any of the Programme AE Modes when the 0 Lux Night View Mode is activated.

Cancelling the Selected Programme AE Function

Press the [PROG. AE] Button repeatedly until none of the indications ([, [, [, [, []) are displayed.

運動狀態

- 當播放用運動狀態拍攝的場景時，可欣賞圖像細部極其精微、清晰的慢動作和靜止放影。
- 請避免在熒光燈、水銀蒸氣燈或鈉燈下拍攝，否則放影時可能會產生色彩和亮度的抖晃。
- 如果所攝目標物被強光照射或反射太強，放影時可能會出現白色垂直亮條。
- 當場景光照不足時，[] 指示將閃爍。
- 如果使用此狀態進行室內拍攝，放影時影像可能會出現閃動。

素描特寫狀態

- 如果使用此狀態進行室內拍攝，放影時影像可能會出現閃動。

弱光狀態

- 在極暗的場景下拍攝時，可能無法將目標物拍得足夠亮。
- 如果在拍攝時使用此狀態，在播放畫面時可能會出現噪聲。


聚光燈狀態

- 使用本狀態進行拍攝時，被攝畫面可能會變得很黑。
- 如果目標物極亮，被攝畫面可能會泛白。

碎浪和雪地狀態

- 如果目標物極亮，被攝畫面可能會泛白。

Sports Mode

- When playing back scenes recorded in the Sports Mode, you can enjoy slow motion and still playback of very sharp images with fine details.
- Avoid recording under fluorescent, mercury-vapour or sodium lamps as the colour and the brightness of the playback picture may fluctuate.
- When recording subjects lit by strong lights or with much light reflection, the playback picture may contain vertical streaks of light.
- When the scene is not sufficiently lit, the [] Indication flashes.
- When using this mode for recording indoors, the playback picture may flicker.

Portrait Mode

- When using this mode for recording indoors, the playback picture may flicker.

Low Light Mode

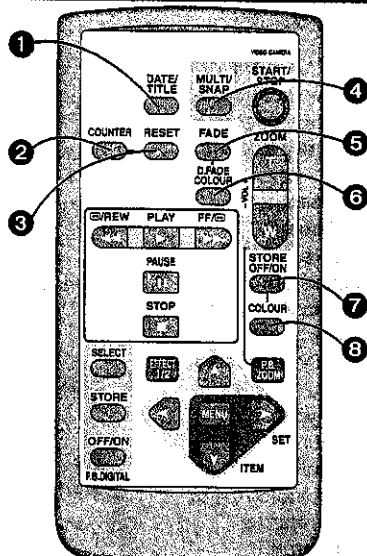
- It may not be possible to sufficiently brighten up extremely dark scenes.
- The use of this mode for recording may cause noise in the playback picture.

Spotlight Mode

- When using this mode, the recorded picture may be extremely dark.
- If a subject is extremely bright, the recorded picture may be whitish.

Surf & Snow Mode

- If a subject is extremely bright, the recorded picture may be whitish.



中文

遙控器使用

該遙控器可讓您參入攝影之中，並從攝錄影機的前面控制拍攝操作。

■ 遙控器上的按鈕

- ① 日期/時間/題名鈕 [DATE/TITLE] (→ 52, 130, 136)
- ② 指示替換鈕 [COUNTER]
可選擇希望的計時器指示。(→ 156)
- ③ 復位鈕 [RESET]
可將磁帶計時器復位為零。(→ 154)
- ④ 抓拍/多畫面/畫中畫鈕 [MULTI/SNAP]
(→ 76, 90, 92, 94, 140, 142, 144)
- ⑤ 淡化鈕 [FADE] (→ 74, 98, 148)
- ⑥ 數位淡化色彩選擇鈕 [D.FADE COLOUR] (→ 98, 148)
- ⑦ 數位影像存儲鈕 [STORE] (→ 132, 150)
數位影像重疊鈕 [OFF/ON] (→ 132, 150)
- ⑧ 數位影像色彩選擇鈕 [COLOUR] (→ 132, 150)

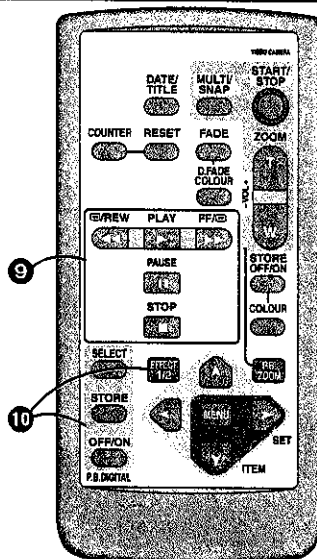
ENGLISH

Using the Remote Controller

The Remote Controller lets you take part in the action and control the recording operation from in front of the Movie Camera.

■ Buttons on the Remote Controller

- ① Date/Time/Title Button [DATE/TITLE] (→ 52, 130, 136)
- ② Indication Shift Button [COUNTER]
To select the desired counter indication. (→ 156)
- ③ Reset Button [RESET]
To reset the Tape Counter to zero. (→ 154)
- ④ Snapshot/Multi Image/Picture-in-Picture Button [MULTI/SNAP] (→ 76, 90, 92, 94, 140, 142, 144)
- ⑤ Fade Button [FADE] (→ 74, 98, 148)
- ⑥ Colour Selector Button for Digital Fade [D.FADE COLOUR] (→ 98, 148)
- ⑦ Digital Image Store Button [STORE] (→ 132, 150)
Digital Image SuperImposer Button [OFF/ON] (→ 132, 150)
- ⑧ Colour Selector Button for Digital Image [COLOUR] (→ 132, 150)



中文

9 放影控制

倒帶 / 倒帶尋影鈕 [◀◀]

可開始倒帶尋影放影。(→ 70)

可倒帶。(→ 62)

可高速倒轉磁帶。(→ 68)

可啟動攝影機尋影功能。(→ 58)

可啟動拍攝檢查功能。(→ 58)

快進 / 快進尋影鈕 [▶▶]

可開始快進尋影放影。(→ 70)

可快進錄影帶。

可啟動攝影機尋影功能。(→ 58)

放影鈕 [▶] (→ 62)

暫停鈕 [||] (→ 70)

停止鈕 [■] (→ 62)

10 放影數位效果

數位效果鈕 [EFFECT1/2]

可選擇數位效果 1 或數位效果 2。(→ 138)

選擇鈕 [SELECT]

選擇希望的放影數位效果。(→ 138)

儲存鈕 [STORE]

可在記憶中儲存一幅靜止畫面，供划變或混合功能使用。
(→ 146)

關 / 開鈕 [OFF/ON]

可暫時關閉所選擇的數位效果狀態或將暫時關閉的數位狀態重新啟動。(→ 138)

可從記憶中儲存的靜止畫面開始 / 暫停划變或混合轉換。

(→ 146)

ENGLISH

9 Controls for Playback

Rewind/Review Button [◀◀]

To start review playback. (→ 70)

To rewind the tape. (→ 62)

To rewind the tape at high speed. (→ 68)

To activate the Camera Search Function. (→ 58)

To activate the Recording Check Function. (→ 58)

Fast Forward/Cue Button [▶▶]

To start cue playback. (→ 70)

To fast-forward the tape.

To activate the Camera Search Function. (→ 58)

Playback Button [▶] (→ 62)

Pause Button [||] (→ 70)

Stop Button [■] (→ 62)

10 Playback Digital Effects

Digital Effects Button [EFFECT1/2]

To select the Digital Effects 1 or Digital Effects 2. (→ 138)

Selection Button [SELECT]

To select the desired playback digital effect. (→ 138)

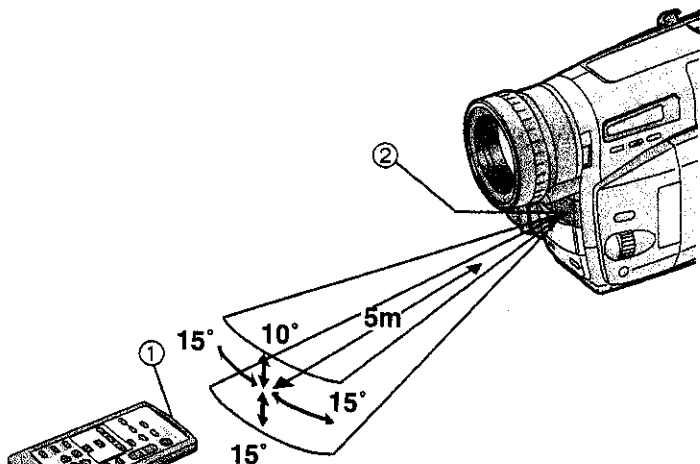
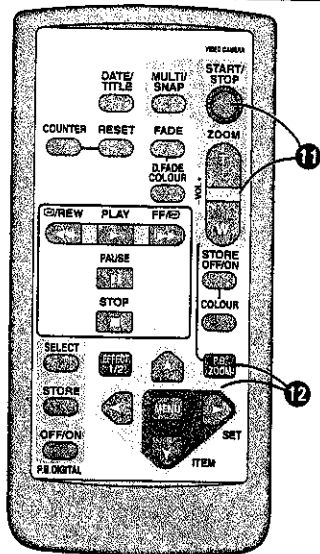
Store Button [STORE]

To store a still picture in memory for the Wipe or Mix Function. (→ 146)

Off/On Button [OFF/ON]

To suspend the selected digital effect mode or re-activate it. (→ 138)

To start/pause a Wipe or Mix transition from the still picture stored in memory. (→ 146)



中文

11 拍攝和變焦/音量控制

拍攝開始/停止鈕 [START/STOP] (→ 54)

變焦/音量鈕 [ZOOM/VOL] (→ 60·62·88·152)

12 用於菜單設定和放影變焦的控制

菜單鈕 [MENU]

項目設定鈕 [SET]

項目選擇鈕 [ITEM]

放影變焦鈕 [P.B. ZOOM]

可放大所播放畫面的某些部分。(→ 152)

- 每次按此鈕，可在放影變焦功能開啟/關閉的狀態間進行切換。

向上鈕 [▲]

向左/向右鈕 [◀, ▶]

向下鈕 [▼]

■ 正確操作遙控器的條件

- 離攝錄影機的距離不能超過5米。
- 勿讓遙控器上的發射窗①或攝錄影機上的遙控感應器②暴露
在直射陽光下或被布等物品蓋住。
- 當用遙控器操作變焦該功能時，將無法改變變焦速度。而且，
按遙控器上的變焦鈕與攝錄影機上的機械變焦功能的實際動作
之間，存在着稍微的延遲。
- 在1米的範圍之內，從側面([MENU]鈕一側)也可使用遙控
器。

ENGLISH

11 Controls for Recording and Zoom/Sound Volume

Recording Start/Stop Button [START/STOP] (→ 54)

Zoom/Sound Volume Buttons [ZOOM/VOL]
(→ 60, 62, 88, 152)

12 Controls for Menu Settings and Playback Zoom

Menu Button [MENU]

Item Set Button [SET]

Item Select Button [ITEM]

Playback Zoom Button [P.B. ZOOM]

To enlarge a part of the playback picture. (→ 152)

- Each time this button is pressed, the Playback Zoom
Function is toggled between on and off.

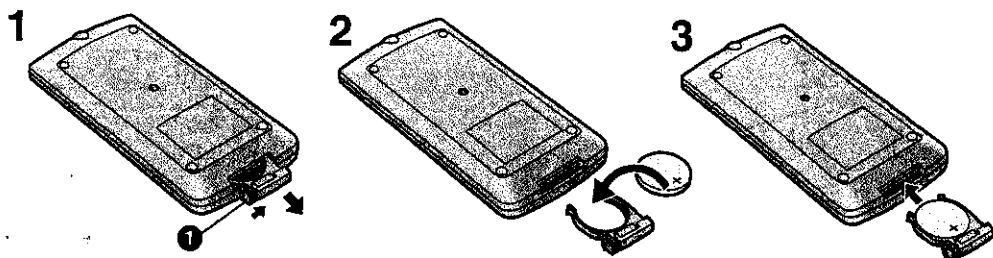
Upward Direction Button [▲]

Left/Right Direction Button [◀, ▶]

Downward Direction Button [▼]

■ Conditions for Correct Operation of the Remote Controller

- The distance to the Movie Camera must not be more than
5 metres.
- The Transmitter Window ① on the Remote Controller or the
Remote Control Sensor ② on the Movie Camera must not
be exposed to direct sunlight and not be covered with
clothes, etc.
- When operating the Zoom Function with the Remote
Controller, it is not possible to vary the zooming speed.
Also, there is a slight delay between pressing the Zoom
Buttons on the Remote Controller and the mechanical zoom
adjustment on the Movie Camera.
- Within a distance of about 1 metre, it is also possible to use
the Remote Controller from the side ([MENU] Button side).



中文

將鈕扣式電池插入遙控器

- 1 按卡扣①，同時拔出電池室蓋。
- 2 使鈕扣式電池印有(+)標記的面朝上，裝入電池。
- 3 將電池室蓋插回遙控器。

■ 鈕扣式電池的更換

- 當鈕扣式電池的電量耗盡時，請更換新的CR2025型電池。
(電池的壽命約為1年。但是，實際使用壽命會因使用頻度而有所不同。)
- 裝入電池時，請確保電池的極性正確無誤。
- 請不要將電池短路。
- 當您長時間不用遙控器時，請將電池取出，並將其存放在陰涼乾燥的地方。

注意事項

電池若更換不當，則會有爆炸危險。請只使用該設備廠家推薦的同類或同型號電池。並按照廠家的指導扔掉用過的電池。

警告

有火災、爆炸和燃燒之危險。請勿充電、分解、加熱至100℃以上或焚化。請將鈕扣式電池保存在兒童觸摸不到的地方。絕對不能將鈕扣式電池放入口中。若已吞下，請立即就醫。

ENGLISH

Inserting the Button-type Battery into the Remote Controller

- 1 Pull out the Battery Holder while pressing the Stopper ①.
- 2 Insert the button-type battery with the stamped (+) mark facing upward.
- 3 Insert the Battery Holder into the Remote Controller.

■ Replacing the Button-type Battery

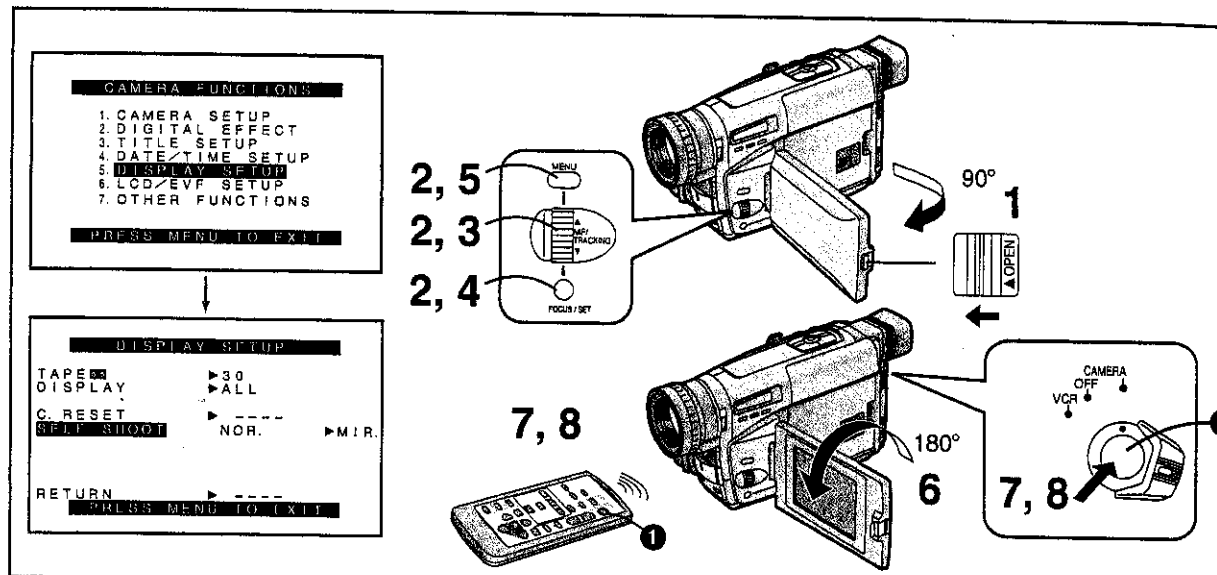
- When the button-type battery is exhausted, replace it with a new CR2025 battery.
(The life of the battery is about 1 year. However, it depends on the frequency of use.)
- Make sure you insert the battery with its poles correctly aligned.
- Do not short-circuit the battery.
- When you do not use the Remote Controller for a long time, take out the battery and store it in a cool, dry place.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

WARNING

Risk of fire, explosion and burns. Do not recharge, disassemble, heat above 100°C or incinerate. Keep the Button-Type battery out of the reach of children. Never put Button-Type battery in mouth. If swallowed call your doctor.



中文

使液晶顯示監視器朝向前方進行自我攝影時

旋轉液晶顯示監視器，使其朝前，以便您能夠瞄準攝錄影機，並觀看電子尋像器上的畫面，同時，攝錄影機前面的人，可在拍攝中檢查液晶顯示監視器上的畫面。如果您將攝錄影機安裝在三腳架上，並使用遙控器時，便也可加入正在拍攝的活動中，並從液晶顯示監視器的前面檢查畫面。

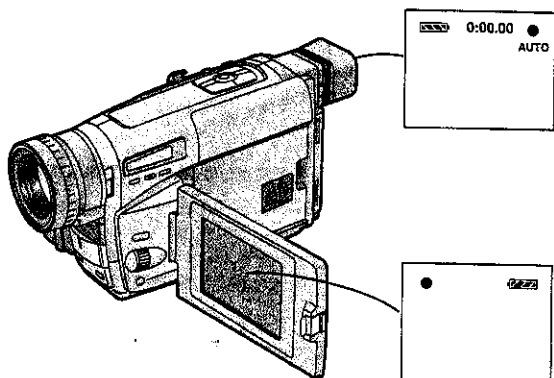
- 1 向左滑動[▲OPEN]桿，同時如箭頭所示，將液晶顯示監視器打開約90°。
- 2 顯示出[DISPLAY SETUP](屏幕顯示設定)子菜單。(→ 28)
- 3 轉動[▲▼]環，選擇[SELF SHOOT](自拍)。
- 4 按[SET]鈕，選擇需要的狀態([NOR.]或[MIR.])。
 - [NOR.]意思為普通狀態。
 - [MIR.]意思為鏡面狀態。(→ 126)
- 5 按[MENU](菜單)鈕，退出菜單。
- 6 轉動液晶顯示監視器，直至其面向約180°為止。
- 7 按拍攝開始/停止鈕①。
- 停止拍攝時
- 8 按拍攝開始/停止鈕①。

ENGLISH

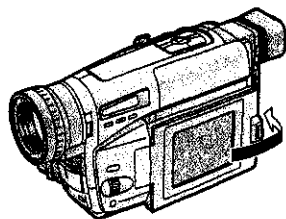
Recording Yourself with the LCD Monitor Facing Forward

Turning the LCD Monitor so that it faces forward, allows you to aim the Movie Camera and view the picture in the Finder while the persons in front of the camera can check the picture on the LCD Monitor during recording. If you mount the Movie Camera on a tripod and use the Remote Controller, you can also take part in the action that you are recording and check the picture from the front on the LCD Monitor.

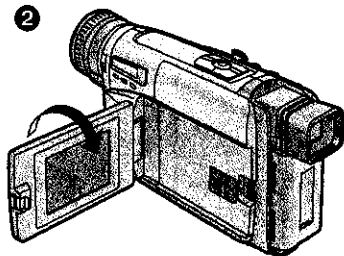
- 1 Slide the [▲OPEN] Lever to the left and simultaneously open the LCD Monitor in the direction of the arrow approximately 90°.
- 2 Display the [DISPLAY SETUP] Sub-Menu. (→ 28)
- 3 Turn the [▲▼] Dial to select [SELF SHOOT].
- 4 Press the [SET] Button to select the desired mode ([NOR.] or [MIR.]).
 - [NOR.] means Normal Mode.
 - [MIR.] means Mirror Mode. (→ 126)
- 5 Press the [MENU] Button to exit the menu.
- 6 Turn the LCD Monitor until it faces forward approximately 180°.
- 7 Press the Recording Start/Stop Button ①.
- Stopping Recording
- 8 Press the Recording Start/Stop Button ①.



①



②



中文

■ 鏡面狀態

當您將液晶顯示監視器朝前，進行自我攝影時，其所顯示的正在拍攝的畫面可能很難讓人適應。

這是因為我們已習慣於照鏡子，所以觀看鏡面圖像時的感覺比較自然。該攝錄影機具備鏡面狀態功能，可以如鏡面圖像一樣地顯示畫面。

然而，即使您已經選擇了鏡面狀態，也將以普通方法錄製畫面。

- 在鏡面狀態下進行拍攝時，將無法顯示和錄製日期、時間和/或題名指示。

在鏡面狀態下，只有下述指示才能被顯示在液晶顯示監視器和電子尋像器中：

[●]：拍攝狀態指示

[||●]：拍攝暫停狀態指示

[]：剩餘電池指示

[]：一般警告/報警指示

(除這4個指示以外，電子尋像器中也會出現計時器指示和程序AE狀態指示。)

當您打算確認其他指示時，請使液晶顯示監視器回到上圖所示的位置①或②。

尤其當出現[]指示時，須使液晶顯示監視器回到位置①或②，以便能夠確認實際的警告/報警指示。

- 如果您轉動液晶顯示監視器，使其面朝前時，電子尋像器也會自動打開。然而，在下列情況下，電子尋像器會關閉：

- 從攝錄影機狀態轉換至放影機狀態。
- 關閉液晶顯示監視器，使屏幕面朝外(如上圖①所示)。

ENGLISH

■ Mirror Mode

When recording yourself with the LCD Monitor facing forward, the picture shown on it the way it is being recorded may be difficult to get used to.

This is because we usually look at ourselves in the mirror, so we see a mirror-image and this feels more natural. This Movie Camera features the Mirror Mode which displays the picture as a mirror-image.

However, even if you have selected in the Mirror Mode, the picture is recorded in the normal way.

- It is not possible to display and record the Date, Time and/or Title Indication in the Mirror Mode.

In the Mirror Mode, only the following indications can be displayed on the LCD Monitor and in the Finder:

[●]: Recording Mode Indication

[||●]: Recording Pause Mode Indication

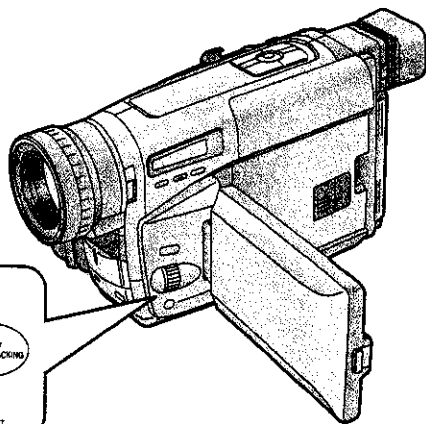
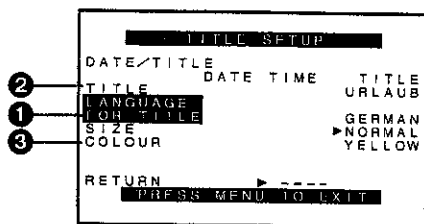
[]: Remaining Battery Indication

[]: General Warning/Alarm Indication

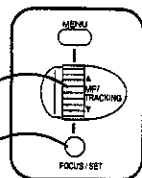
(In addition to these four indications, the Counter Indication and the Programme AE Mode Indications can also appear in the Finder.)

When you want to confirm other indications, return the LCD Monitor to position ① or ② shown in the illustration above. Especially when the [] Indication is displayed, be sure to return the LCD Monitor to position ① or ② so that you can confirm the actual Warning/Alarm Indication.

- If you turn the LCD Monitor so that it faces forward, the Finder also automatically turns on. However, in the following cases, the Finder turns off:
 - Changing from the Camera to the VCR Mode.
 - Closing the LCD Monitor with the screen facing outward (as shown above ①).



2, 4
1, 3, 5



中文

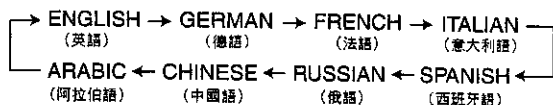
將編排好的題名插入畫面中進行拍攝時

您可將10個預編排好的題名之一插入拍攝的特別事件中，如婚禮或生日慶祝會等。這些題名可以使用8種語言。

選擇[TITLE SETUP](標題設定)子菜單上的[LANGUAGE FOR TITLE](題名所用語言) ❶ 之後... (→ 28)

1 按[SET](設定)鈕，選擇需要的語言。

- 語言將依下列順序進行改變：



2 轉動[▲▼]環，選擇[TITLE](題名) ❷。

3 按[SET]鈕，選擇需要的題名。

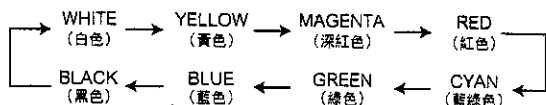
- 題名將依下列順序進行改變：
(在其他可使用的語言中，題名也是以同樣的順序排列。)

[假日] → [生日快樂!] → [婚禮] → [快樂家庭] →
[聚會] → [結束] → [祝福] → [聖誕節] → [紀念日] →
[新年快樂!] → [假日]

4 轉動[▲▼]環，選擇[COLOUR](色彩) ❸。

5 按[SET]鈕，選擇需要的色彩。

- 您可從8種題名色彩中選擇任一種。
- 題名色彩將依下列順序進行改變：



ENGLISH

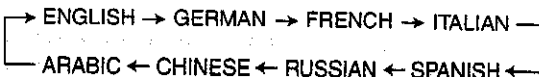
Recording with Pre-programmed Titles Inserted in the Picture

You can insert one of 10 pre-programmed titles in recordings of special occasions such as weddings and birthday parties. These titles are available in 8 languages.

After selecting [LANGUAGE FOR TITLE] ❶ on the [TITLE SETUP] Sub-Menu... (→ 28)

1 Press the [SET] Button to select the desired language.

- The languages change in the following order:



2 Turn the [▲▼] Dial to select [TITLE] ❷.

3 Press the [SET] Button to select the desired title.

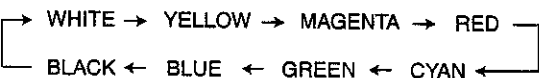
- The titles change in the order shown below.
(In the other available languages, they are arranged in the same order.)

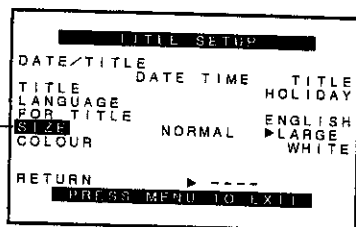
[HOLIDAY] → [HAPPY BIRTHDAY] →
[WEDDING] → [FAMILY] → [PARTY] →
[THE END] → [CONGRATULATIONS] →
[MERRY CHRISTMAS] → [HAPPY MEMORIES]
→ [HAPPY NEW YEAR] → [HOLIDAY] →

4 Turn the [▲▼] Dial to select [COLOUR] ❸.

5 Press the [SET] Button to select the desired colour.

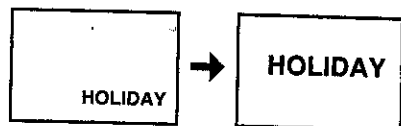
- You can select the colour of the title from among 8 colours.
- The colours for the title change in the following order:



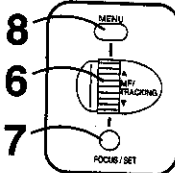
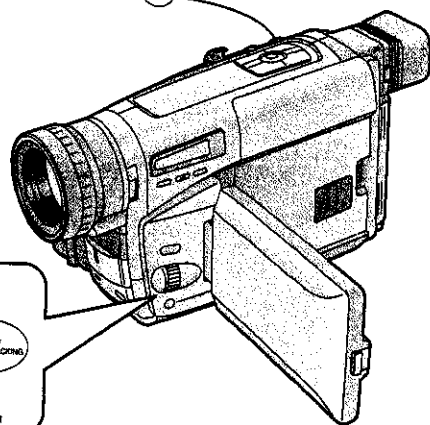


1

2



DATE/
TITLE



中文

6 轉動[▲▼]環，選擇[SIZE](題名尺寸)①。

7 按[SET](設定)鈕，選擇需要的尺寸([NORMAL](普通)或[LARGE](大))。

- 您可從2種題名指示中選擇任一種尺寸。
- 當您將題名尺寸從[NORMAL]改為[LARGE]時，題名指示將如上②所示，進行改變。

8 按[MENU](菜單)鈕，退出菜單。

- 在顯示大尺寸的題名時，即使某些功能已被啟動，也可能無法顯示該功能對應的指示。
- 如果您在[TITLE SETUP](標題設定)子菜單上的[SIZE]中選擇了[LARGE]，在您開始和停止拍攝時總是短暫顯示的大字[RECORD](拍攝)和[PAUSE](暫停)指示將不顯示。
- 在您改變題名語言(→ 128)，日期/時間/題名指示(→ 52)或者改變題名(→ 128)，題名尺寸或其色彩(→ 128)後，退出[TITLE SETUP](標題設定)子菜單時日期/時間/題名指示仍將顯示。
- 當使用微電腦連接套件，將攝影錄影機的數位靜音端子連接至微電腦時(→ 162)，題名只能以白色進行顯示，即使您在菜單中為其選擇了其他色彩。

編排好的題名插入畫面中進行拍攝時

在拍攝中，按[DATE/TITLE](日期/題名)鈕，使題名出現。

刪除題名時

按[DATE/TITLE]鈕，使題名消失。

ENGLISH

6 Turn the [▲▼] Dial to select [SIZE] ①.

7 Press the [SET] Button to select the desired size ([NORMAL] or [LARGE]).

- You can choose either of 2 sizes for the title.
- When you change the title size from [NORMAL] to [LARGE], the Title Indication changes as shown above ②.

8 Press the [MENU] Button to exit the menu.

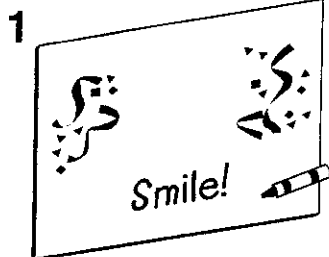
- When a large-size title is displayed, some indications do not appear even if the corresponding modes are activated.
- If you set [SIZE] on the [TITLE SETUP] Sub-Menu to [LARGE], the large [RECORD] and [PAUSE] Indications, which usually appear briefly when you start or stop recording, do not appear.
- The Date/Time/Title Indication remains displayed when you exit the [TITLE SETUP] Sub-Menu after having change the language of the title (→ 128), the type of Date/Time/Title Indication (→ 52), the title itself (→ 128), the size of the title or the colour of the title (→ 128).
- When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), the title is always in white, even if you choose another colour on the menu.

Recording with Pre-programmed Title Inserted in the Picture

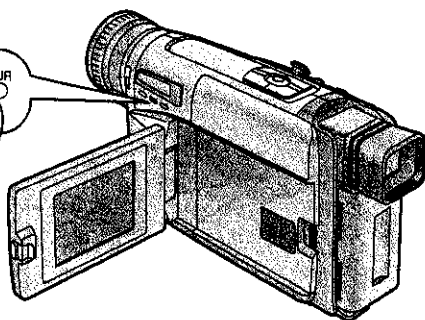
During recording, press the [DATE/TITLE] Button to make the title appear.

Deleting the Title

Press the [DATE/TITLE] Button to make the title disappear.



3, 5 4



中文

創作自己的題名並將其插入拍攝中 (數位重疊功能)

該功能可讓您將手書題名、標誌牌和印刷題名的圖像(或對比強烈的某些類似目標物)·儲存在攝錄影機的數位圖像記憶中。

然後, 您可將該圖像的黑色部分改為需要的色彩, 將其重疊在拍攝中。

1 準備好對比強烈的題名(例如用粗黑色標誌筆在書寫的文字等)。

2 使攝錄影機處於拍攝暫停狀態, 將其對準題名。

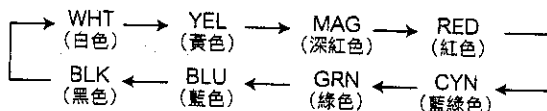
- 如果全自動狀態不能提供鮮明的圖像, 請用手動調節進行變焦。(→ 110)
- 當您打算捕捉小題名時, 請使用微距拉近功能。(→ 60)
- 由於題名圖像的四邊會被自動切除, 在瞄對攝錄影機時, 請在實際題名的四周留出足夠的空間。

3 按住[STORE](儲存)鈕2秒鐘以上。

- 題名即被儲存在數位圖像記憶中, 並持續顯示。

4 重複按[COLOUR](色彩)鈕, 直至顯示出需要的色彩
①。

- 題名色彩將依下列順序進行改變:



5 輕按[OFF/ON](關/開)鈕, 使題名消失。

- 重複輕按[OFF/ON]鈕, 將使題名交替出現和消失。

ENGLISH

Creating Your Own Titles and Inserting Them During Recording (Digital Superimposer Function)

This function lets you store the image of a handwritten title, signboard, printed title, (or some similar object with strong contrast) in the Movie Camera's digital image memory. You can then change the dark parts of this image to a desired colour and superimpose it during recording.

1 Prepare a title that has strong contrast
(e.g. write with a thick black marker).

2 With the Movie Camera in the Recording Pause Mode, aim it at the title.

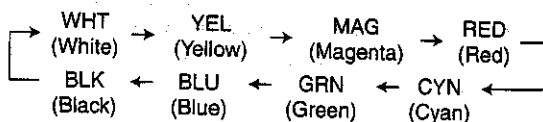
- If the Full Auto Mode does not provide a sharp picture, adjust the focus manually. (→ 110)
- When you want to capture a small title, use the Macro Close-up Function. (→ 60)
- As the title picture is automatically cropped on all four sides, aim the Movie Camera so that there is sufficient empty space around the actual title.

3 Press the [STORE] Button for more than 2 seconds.

- The title is now stored in the digital image memory and it remains displayed.

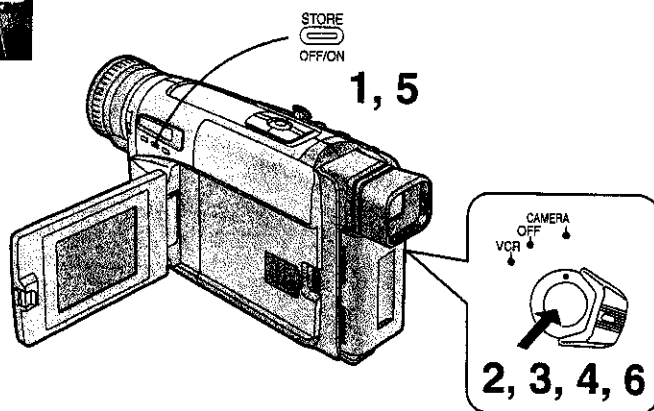
4 Press the [COLOUR] Button repeatedly until the desired colour **①** is displayed.

- The colours of the title change in the following order:



5 Press the [OFF/ON] Button briefly to make the title disappear.

- Pressing the [OFF/ON] Button briefly repeatedly makes the title appear and disappear.



中文

在拍攝的開始部分插入您獨自的題名

輕按[OFF/ON](關/開)鈕，使題名出現。

- 確認所示的色彩與想要的場景相配。如有必要，可以改變色彩。(→ 132)

按拍攝開始/停止鈕，開始拍攝。

- 若想在場景的持續拍攝中使題名消失，輕按[OFF/ON]鈕。

按拍攝開始/停止鈕，停止拍攝。

在拍攝過程中插入您獨自的題名

按拍攝開始/停止鈕，開始拍攝。

在您打算插入題名之處，輕按[OFF/ON]鈕，使題名出現。

- 若想在場景的持續拍攝中使題名消失，輕按[OFF/ON]鈕。

按拍攝開始/停止鈕，停止拍攝。

在您存入新的題名，存儲在數位圖像記憶中的題名可能會自動取消。

當取出電池、拔掉交流轉接器或電池耗盡時，存儲在數位圖像記憶中的題名可能會自動取消或部分丟失。

如果在顯示您保存在數位圖像存儲器中的題名的同時使用數位淡化1、數位淡化2或數位淡化3功能(→ 98)，您可以使題名與畫面同時淡化。

將題名存儲在數位圖像記憶中時，不能使用負片狀態。

關閉攝錄影機然後再打開時，與畫面一起顯示過的題名將不再出現。若使其重新出現，輕按[OFF/ON]鈕。

當使用微電腦連接套件，將攝錄影機的數位靜畫端子連接至微電腦時(→ 162)，將無法在圖像中插入您獨自的題名。

ENGLISH

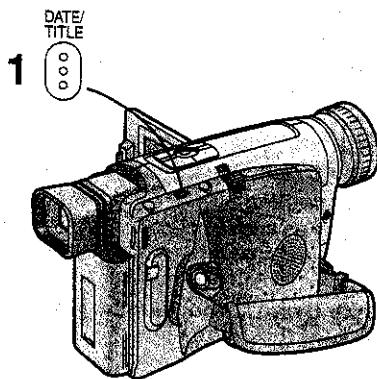
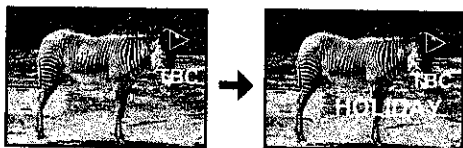
Inserting Your Own Title at the Beginning of a Recording

- 1 Press the [OFF/ON] Button briefly to make the title appear.**
 - Confirm that the colour indicated is suitable for the intended scene. If necessary, change the colour. (→ 132)
- 2 Press the Recording Start/Stop Button to start recording.**
 - To make the title disappear while recording of the scene continues, press the [OFF/ON] Button briefly.
- 3 Press the Recording Start/Stop Button to stop recording.**

Inserting Your Own Title During Recording

- 4 Press the Recording Start/Stop Button to start recording.**
- 5 At the point where you want to insert the title, press the [OFF/ON] Button briefly to make the title appear.**
 - To make the title disappear while recording of the scene continues, press the [OFF/ON] Button briefly.
- 6 Press the Recording Start/Stop Button to stop recording.**

- The title stored in the digital image memory may be automatically cancelled when you store a new title.
- The title stored in the digital image memory may be automatically cancelled or it may be missing partially when the Battery is removed, the AC Adaptor is disconnected or the Battery becomes discharged.
- By displaying the title which you stored in the digital image memory and using the Digital Fade 1, Digital Fade 2 or Digital Fade 3 Function (→ 98), you can fade the title together with the picture.
- It is not possible to apply the Negative Effect when storing a title in the digital image memory.
- After turning the Movie Camera off and then on again, the title that had been displayed in the picture is no longer displayed. To make it appear again, press the [OFF/ON] Button briefly.
- When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), inserting your own titles in the picture is not possible.



中文

放影中各種功能的使用

使用該攝錄影機時，您可在放影中，在已錄畫面上添加各種效果。當您將分別拍攝的場景編輯成完整的影像時，該功能特別便於創造性地強調某些場景。

1. 放影題名顯示
2. 放影數位效果 (→ 138)
3. 放影數位重疊 (→ 150)

只有在啟動TBC功能時，才能使用上述功能。請確認[TBC]指示已顯示。(→ 64)

放影題名指示

進行拍攝時，可以將日期/時間/題名指示插入圖像中 (→ 128)，同樣，在放影(編輯)時，也可以將其插入圖像中。

您可以在[TITLE SETUP](標題設定)子菜單中選擇希望的語言、題名、色彩和尺寸。(當使用微電腦連接套件，將攝錄影機的數位靜音端子連接至微電腦時 (→ 162)，題名只能以白色進行顯示，即使您在菜單中為其選擇了其它色彩。)

只有在啟動TBC功能時，才能使用放影題名指示功能。請確認[TBC]指示已顯示。(→ 64)

- 1 放影中，按[DATE/TITLE](日期/題名)鈕，以重疊系統的日期/時間/題名指示。

- 使已經重疊的日期/時間/題名指示消失時，請再按[DATE/TITLE]鈕。
- 攝錄影機內藏時鐘可產生日期/時間指示。

ENGLISH

Using Various Functions during Playback

With this Movie Camera you can add various effects to the recorded picture during playback. This is especially convenient for creatively enhancing certain scenes when you edit individual recorded scenes into a finished video.

1. Playback Title Indication
2. Playback Digital Effects (→ 138)
3. Playback Digital Superimposer (→ 150)

You can use these functions only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Playback Title Indication

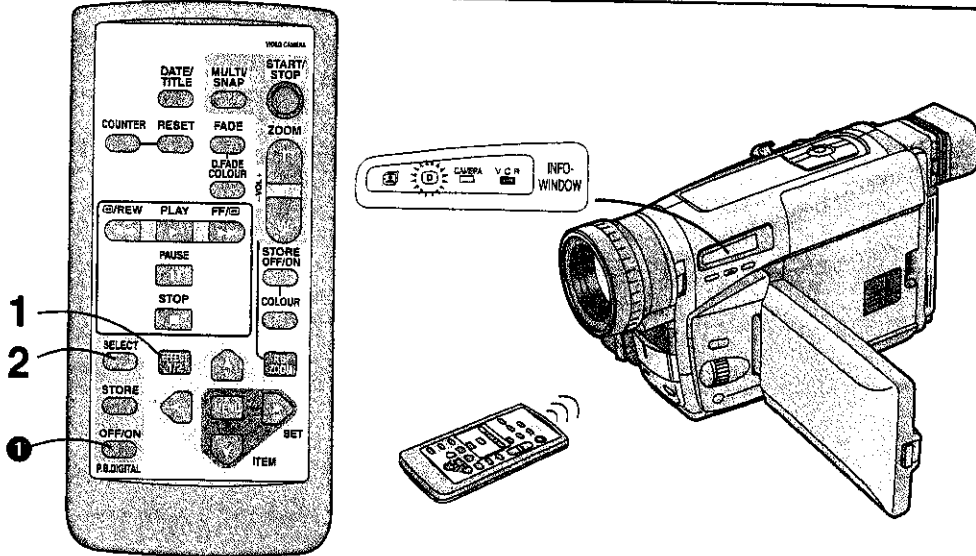
The Date/Time/Title Indication that can be inserted in the pictures during recording (→ 128) can also be inserted in the picture during playback (editing).

You can select the desired language, title, colour and size on the [TITLE SETUP] Sub-Menu. (When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), the title is always in white, even if you choose another colour on the menu.)

The Playback Title Indication Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

- 1 During playback, press the [DATE/TITLE] Button to superimpose the desired Date/Time/Title Indication.

- To make the superimposed Date/Time/Title Indication disappear, press the [DATE/TITLE] Button again.
- The Date/Time Indication is generated by the Movie Camera's built-in clock.



中文

放影數位效果

本攝錄影機為您提供了多種不同的數位效果狀態，使您可以在放影時在所拍攝的畫面上添加特別的數位圖像效果。根據拍攝時的使用情況，數位效果被分為數位效果1和數位效果2 (→ 80, 82, 84)。只有在啟動TBC功能時，才能使用放影數位效果功能。請確認[TBC]指示已顯示。(→ 64)

EFFECT1 (功能1)

- ① MOSAIC (馬賽克狀態)
- ② STRETCH (加寬狀態)
- ③ MIRROR (鏡面狀態)
- ④ STROBE (頻閃狀態)
- ⑤ MULTI (多畫面狀態)
- ⑥ P IN P (畫中畫狀態)
- ⑦ MIX (混合狀態)
- ⑧ WIPE (划變狀態)

EFFECT2 (功能2)

- ① NEGA (負片狀態)
- ② SOLARI (曝光過久狀態)
- ③ SEPIA (棕色狀態)
- ④ B/W (黑白狀態)
- ⑤ D.FADE1 (數位淡化1)
- ⑥ D.FADE2 (數位淡化2)
- ⑦ D.FADE3 (數位淡化3)

1 放像中，按遙控器上的[EFFECT1/2]鈕，選擇[EFFECT1](功能1)或[EFFECT2](功能2)。

- [EFFECT1]或[EFFECT2]指示會出現約1秒鐘。

2 按遙控器上的[SELECT](選擇)鈕，選擇需要的數位效果。

- [D]燈會亮起。
- 重複按[SELECT]鈕，可依①-⑧的順序，改變所選擇的數位效果。

暫停放影數位效果時

您可重複按[OFF/ON]鈕①，暫停或重新啟動數位效果。當數位效果被暫停時，選擇的數位效果指示會閃爍。

取消放影數位效果時

按遙控器上的[SELECT]鈕，使顯示的數位效果指示消失。

- 利用[VCR FUNCTIONS](录像功能)主菜單上的[DIGITAL EFFECT](數碼功能)子菜單，也可設定同樣的設定值。
- 如果您將[CAMERA/OFF/VCR]開關設置為[OFF]，然後再重新將其設置為[VCR]，先前選擇的放影數位效果將被自動取消。
- 在多畫面狀態、畫中畫狀態、混合狀態和划變狀態中，不能使用任何數位淡化狀態。
- 當使用微電腦連接套件，將攝錄影機的數位靜音端子連接至微電腦時(→ 162)，將無法多畫面狀態、畫中畫狀態、混合狀態和划變狀態。

ENGLISH

Playback Digital Effects

There are various modes available for adding special digital picture effects to your recordings during playback. They are identical to the Digital Effects 1 and 2 (→ 80, 82, 84) that can be used during recording.

The Playback Digital Effect Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

EFFECT1

- ① MOSAIC
- ② STRETCH
- ③ MIRROR
- ④ STROBE
- ⑤ MULTI
- ⑥ P IN P
- ⑦ MIX
- ⑧ WIPE

EFFECT2

- ① NEGA
- ② SOLARI
- ③ SEPIA
- ④ B/W
- ⑤ D.FADE1
- ⑥ D.FADE2
- ⑦ D.FADE3

1 During playback, press the [EFFECT1/2] Button on the Remote Controller to select [EFFECT1] or [EFFECT2].

- The [EFFECT1] or [EFFECT2] Indication appears for about 1 second.

2 Press the [SELECT] Button on the Remote Controller to select the desired digital effect.

- The [D] Lamp lights.
- Repeatedly pressing the [SELECT] Button changes the selected digital effect in the order ① to ⑧.

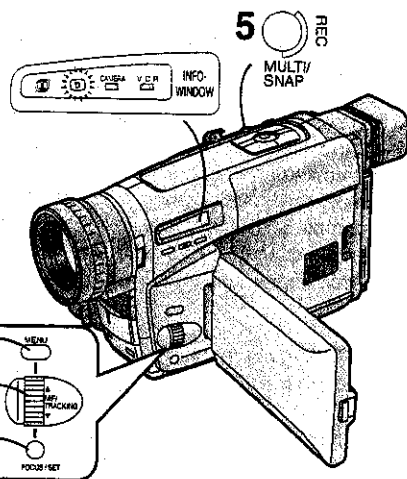
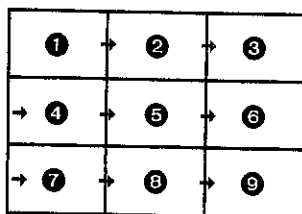
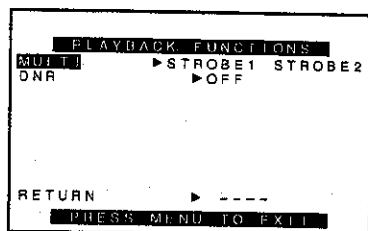
Suspending the Playback Digital Effect Temporarily

You can suspend and re-activate the digital effect by repeatedly pressing the [OFF/ON] Button ①. When the digital effect is temporarily suspended, the indication of the selected effect flashes.

Cancelling the Playback Digital Effect

Press the [SELECT] Button on the Remote Controller to make the displayed digital effect indication disappear.

- The same setting can also be set using the [DIGITAL EFFECT] Sub-Menu on the [VCR FUNCTIONS] Main-Menu.
- If you set the [CAMERA/OFF/VCR] Switch to [OFF] and then set it to [VCR] again, the previously selected Playback Digital Effect is automatically cancelled.
- In the Multi Image Mode, Picture-in-Picture Mode, Mix Mode and Wipe Mode, it is not possible to use any of the Digital Fade Modes.
- When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), the Multi Image Mode, Picture-in-Picture Mode, Mix Mode and Wipe Mode cannot be used.



中文

■ 捕捉和顯示一系列 9 幅靜止畫面 (多畫面頻閃 1 狀態)
該功能可捕捉和顯示約 1.5 秒鐘的一系列 9 幅靜止畫面。該功能特別適合於體育動作或動物研究等的運動分析。
只有在啟動 TBC 功能時，才能使用放影多畫面功能。請確認 [TBC] 指示是否已出現。(→ 64)

請在進行下列步驟之前，設定多畫面狀態。(→ 138)

● 將出現 [MULTI] 指示。

- 1 按 [MENU] 鈕。
- 2 轉動 [▲▼] 環，選擇 [PLAYBACK FUNCTIONS] (放像功能)，然後按 [SET] (設定) 鈕。
● 將顯示 [PLAYBACK FUNCTIONS] (放像功能) 子菜單。
- 3 轉動 [▲▼] 環，選擇 [MULTI] (多畫面)，然後按 [SET] 鈕，選擇 [STROBE1]。
- 4 按 [MENU] 鈕，退出菜單。
- 5 開始播放，在到達您希望捕捉並在頻閃多畫面狀態下加以顯示的場景處，按 [MULTI] 鈕。
● 將顯示一系列 9 幅靜止畫面，同時錄影帶停轉。

使多畫面顯示消失
按 [MULTI] 鈕。

重新顯示多畫面時
持續按 [MULTI] 鈕 2 秒鐘以上。

- 在多畫面狀態下拍攝的圖像質量將稍有下降。
- 棕色或黑白狀態不能用於顯示 9 幅靜止畫面 (即使這些指示可能已出現)。

ENGLISH

■ Capturing and Displaying a Sequence of 9 Still Pictures (Multi Image Strobe 1 Mode)

This function captures and displays a sequence of 9 still pictures over approximately 1.5 seconds. This is very convenient for motion analysis of sports action, animal studies, etc.

The Playback Multi Image Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Set the Multi-Picture Mode before performing the following steps. (→ 138)

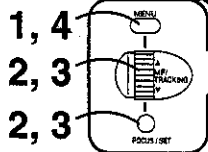
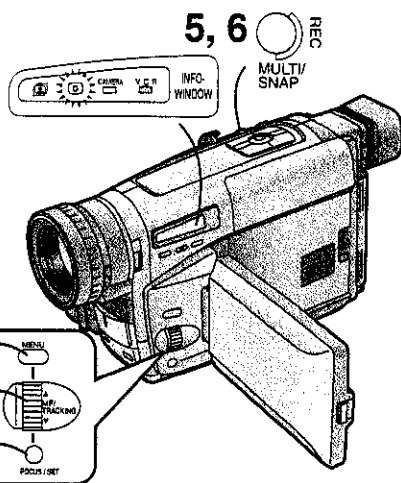
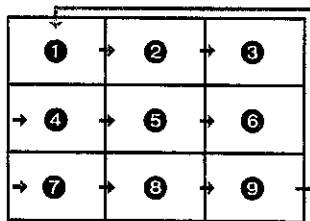
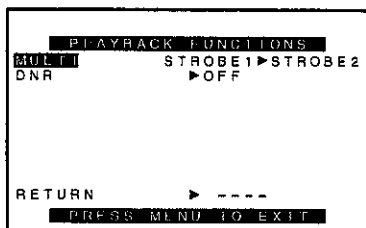
● The [MULTI] Indication appears.

- 1 Press the [MENU] Button.
- 2 Turn the [▲▼] Dial to select [PLAYBACK FUNCTIONS] and then press the [SET] Button.
● The [PLAYBACK FUNCTIONS] Sub-Menu appears.
- 3 Turn the [▲▼] Dial to select [MULTI] and then press the [SET] Button to select [STROBE1].
- 4 Press the [MENU] Button to exit the menu.
- 5 Start playback, and when you reach the scene that you want to capture and display in the Strobe Multi-Picture Mode, press the [MULTI] Button.
● A sequence of 9 still pictures is displayed and the tape stops.

Making the Multi-Pictures Disappear
Press the [MULTI] Button.

Displaying the Multi-Pictures Again
Press the [MULTI] Button for more than 2 seconds.

- The quality of the pictures displayed in the Multi-Picture Mode is slightly inferior.
- The Sepia or Black & White Modes cannot be used for the displayed 9 still pictures (even though these indications may appear).



中文

■ 連續捕捉和顯示 9 幅靜止畫面 (多畫面頻閃 2 狀態)

該功能可連續捕捉和顯示各約 1.5 秒鐘的一系列 9 幅靜止畫面。只有在啟動 TBC 功能時，才能使用放影多畫面功能。請確認 [TBC] 指示是否已出現。(→ 64)

請在進行下列步驟之前，設定多畫面狀態。(→ 138)

- 將出現 [MULTI] 指示。

- 1 按 [MENU] 鈕。
- 2 轉動 [▲▼] 環，選擇 [PLAYBACK FUNCTIONS] (放像功能)，然後按 [SET] (設定) 鈕。
 - 將顯示 [PLAYBACK FUNCTIONS] (放像功能) 子菜單。
- 3 轉動 [▲▼] 環，選擇 [MULTI] (多畫面)，然後按 [SET] 鈕，選擇 [STROBE2]。
- 4 按 [MENU] 鈕，退出菜單。
- 5 開始播放，並按 [MULTI] 鈕。
 - 將顯示一系列 9 幅靜止畫面。
- 6 在您打算捕捉之處，再按 [MULTI] 鈕。

使多畫面顯示消失
按 [MULTI] 鈕。

重新顯示多畫面時
持續按 [MULTI] 鈕 2 秒鐘以上。

- 在多畫面狀態下拍攝的圖像質量將稍有下降。
- 棕色或黑白狀態不能用於顯示 9 幅靜止畫面 (即使這些指示可能已出現)。

ENGLISH

■ Continuously Capturing and Displaying 9 Still Pictures (Multi Image Strobe 2 Mode)

This function continuously captures and displays sequences of 9 still pictures taken over approximately 1.5 seconds each. The Playback Multi Image Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Set the Multi-Picture Mode before performing the following steps. (→ 138)

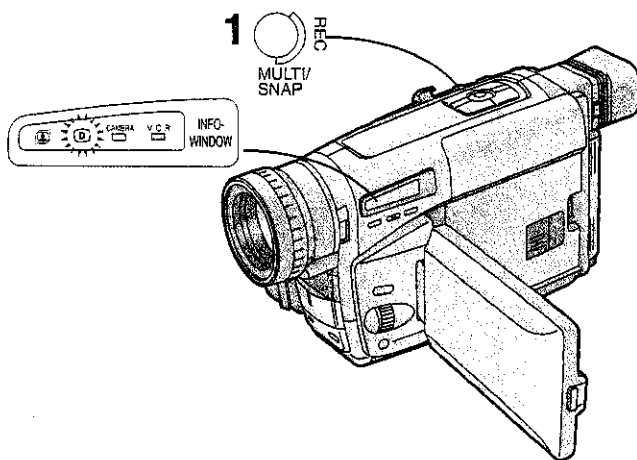
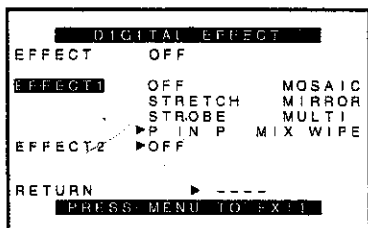
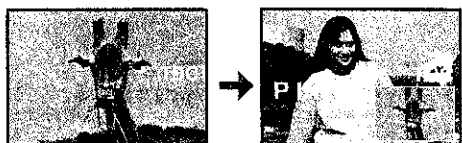
- The [MULTI] Indication appears.

- 1 Press the [MENU] Button.
- 2 Turn the [▲▼] Dial to select [PLAYBACK FUNCTIONS] and then press the [SET] Button.
 - The [PLAYBACK FUNCTIONS] Sub-Menu appears.
- 3 Turn the [▲▼] Dial to select [MULTI] and then press the [SET] Button to select [STROBE2].
- 4 Press the [MENU] Button to exit the menu.
- 5 Start playback and press the [MULTI] Button.
 - Sequences of 9 still pictures are continuously displayed.
- 6 Press the [MULTI] Button again at the point where you want to capture.

Making the Multi-Pictures Disappear
Press the [MULTI] Button.

Displaying the Multi-Pictures Again
Press the [MULTI] Button for more than 2 seconds.

- The quality of the pictures displayed in the Multi-Picture Mode is slightly inferior.
- The Sepia or Black & White Modes cannot be used for the displayed 9 still pictures (even though these indications may appear).



中文

■ 畫中畫功能

使用本功能，您可以在進行通常的圖像放影時同時顯示一幅小靜止畫面。

只有在啟動 TBC 功能時，才能使用放影畫中畫功能。請確認 [TBC] 指示已顯示。(→ 64)

請在進行下列步驟之前，設定畫中畫狀態。(→ 138)

- 將出現 [P IN P] 指示。

1 放影中，在您希望以一幅小靜止畫面加以捕捉的場景處按 [MULTI] 鈕。

- 通常的圖像之中將出現一幅小畫面。

抹消小畫面

按 [MULTI] 鈕。

如果您再按一次 [MULTI] 鈕，將會顯示另一幅小畫面。

取消畫中畫狀態

將 [DIGITAL EFFECT] (數碼功能) 子菜單上的 [EFFECT1] (功能1) 設定為 [OFF]。

- 將用比正常動畫圖像稍微低劣一些的畫質，顯示小圖像。
- 如果您在放影過程中按下 [MULTI] 鈕，畫面上可能會出現微小的雜訊失真。
- 當顯示一幅小靜止畫面時，雖然可以顯示棕色狀態和黑白狀態的指示，但是無法對該小圖像使用棕色狀態或黑白狀態。

ENGLISH

■ Picture-in-Picture Function

This function lets you display a small still picture inside the normal playback picture.

The Playback Picture-in-Picture Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Set the Picture-in-Picture Mode before performing the following steps. (→ 138)

- The [P IN P] Indication appears.

1 During playback, press the [MULTI] Button at the scene that you want to capture as a small still picture.

- A small picture appears inside the normal picture.

Erasing the Small Picture

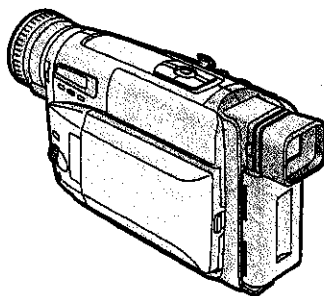
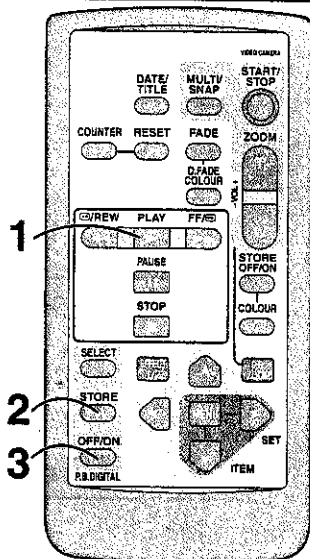
Press the [MULTI] Button.

If you press the [MULTI] Button again, another small picture is displayed.

Cancelling the Picture-in-Picture Mode

Set [EFFECT1] on the [DIGITAL EFFECT] Sub-Menu to [OFF].

- The small picture is displayed with slightly inferior picture quality compared to that of normal moving pictures.
- If you press the [MULTI] Button during playback, slight picture noise may occur.
- When a small still picture is displayed, it is not possible apply the Sepia or Black & White Mode to the small picture, although their indications might appear.



中文

■ 混合功能和划變功能時

只有在啟動TBC功能時，才能使用放影混合或划變功能。請確認[TBC]指示是否已出現。(→ 64)

進行下列步驟之前，請設定混合狀態或划變狀態。(→ 138)

- 將出現[MIX]或[WIPE]指示。

1 按[▶]鈕，開始播放。

2 在您打算作為靜畫而儲存在記憶中的場面處，按[STORE](儲存)鈕。

- [MIX](混合)或[WIPE](划變)指示會出現，圖像將被儲存在記憶中。

3 在您打算使用划變或混合效果的場景處，按[OFF/ON]鈕。

- 該場景將以划變或混合效果進行改變。

取消混合或划變功能時

按遙控器上的[SELECT]鈕，使顯示的[MIX]或[WIPE]指示消失。

- 只有用遙控器，才能在播放中操作划變功能和混合功能。
- 如果您在划變或混合功能操作中，按了[OFF/ON]鈕，該效果將暫停於此點。當您再次按[OFF/ON]鈕時，該效果將復原。
- 在播放錄影帶的未錄製信號的部分時，將無法使用划變狀態或混合狀態。
- 負片和曝光過久效果不能應用於儲存在混合或划變功能所用的數位圖像記憶中的圖像。

ENGLISH

■ Mix Function and Wipe Function

The Playback Mix or Wipe Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Set the Mix Mode or Wipe Mode before performing the following steps. (→ 138)

- The [MIX] or [WIPE] Indication appears.

1 Press the [▶] Button to start playback.

2 Press the [STORE] Button at the moment that you want to store as still image in memory.

- The [MIX] or [WIPE] Indication appears and the picture is stored in memory.

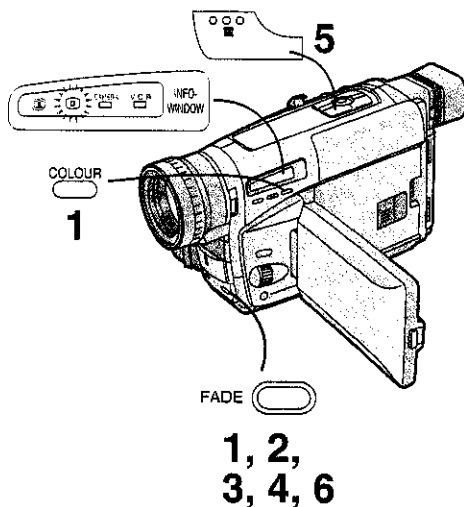
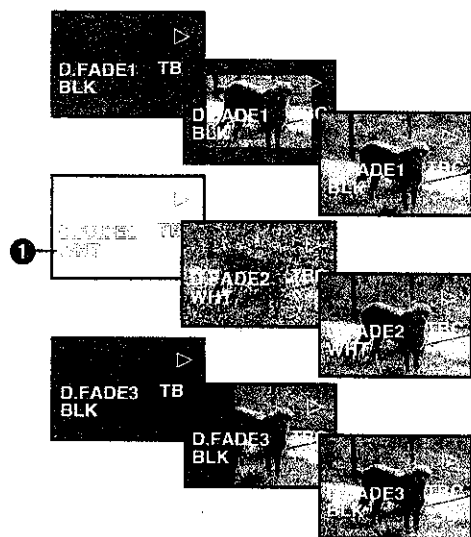
3 Press the [OFF/ON] Button at the scene at which you want to use a Wipe or Mix Effect.

- The scenes change with a Wipe or Mix Effect.

Cancelling the Mix or Wipe Function

Press the [SELECT] Button on the Remote Controller to make the displayed [MIX] or [WIPE] Indication disappear.

- Operating the Wipe Function and the Mix Function during playback is only possible with the Remote Controller.
- If you press the [OFF/ON] Button while the Wipe or Mix is being performed, the effect is paused at that point. If you press the [OFF/ON] Button again, the effect resumes.
- It is not possible to use the Wipe or Mix Function during playback of an unrecorded part of the tape.
- The Negative and Solarisation Effects cannot be applied to a picture stored in the digital image memory for the Mix or Wipe Function.



中文

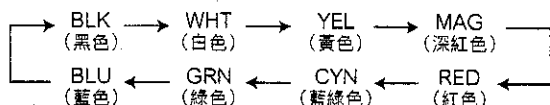
■ 放影數位淡化

有3種放影數位淡化狀態可供使用。它們與數位淡化狀態一樣，可用於拍攝。(→ 98)
只有在啟動TBC功能時，才能使用放影數位淡化狀態。請確認[TBC]指示已顯示。(→ 64)

進行下列步驟之前，請設定需要的數位淡化狀態。(→ 138)

1 在放影中，一邊按住[FADE]鈕，一邊重複按[COLOUR] (色彩) 鈕，直至出現需要的色彩①為止。

- 數位淡化用色彩將依下列順序進行改變：



淡入

2 在放影中，按住[FADE]鈕。

- 畫面將依所選擇數位淡化效果而逐漸消失。

3 在您打算淡入之點，鬆開[FADE]鈕。

淡出

4 在放影中，在您打算淡出之點，按[FADE]鈕，並持續按住不放。

5 待畫面完全消失後，按[■]鈕。

- 放影會停止。

6 鬆開[FADE]鈕。

取消所選擇的數位淡化功能時

將[DIGITAL EFFECT] (數碼功能) 子菜單上的[EFFECT2] (功能2) 設定為[OFF] (關)。

ENGLISH

■ Playback Digital Fade

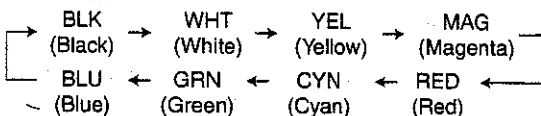
There are 3 Playback Digital Fade Modes available. They are the same as the Digital Fade Modes that can be used for recording. (→ 98)

The Playback Digital Fade Modes can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Set the desired Digital Fade Mode before performing the following steps. (→ 138)

1 During playback, repeatedly press the [COLOUR] Button while keeping the [FADE] Button pressed until the desired colour ① is displayed.

- The colours of the Digital Fade change in the following order:



Fading In

2 During playback, keep the [FADE] Button pressed.

- The picture disappears gradually with the selected digital fade effect.

3 Release the [FADE] Button at the point where you want to fade in.

Fading Out

4 During playback, press the [FADE] Button at the point where you want to fade out, and keep it pressed.

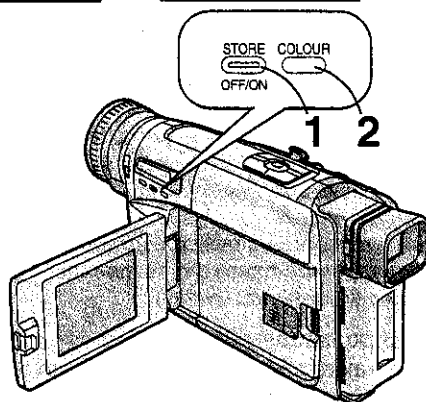
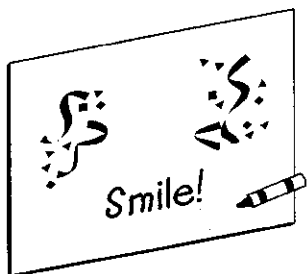
5 After the picture has completely disappeared, press the [■] Button.

- Playback stops.

6 Release the [FADE] Button.

Cancelling the Selected Digital Fade Function

Set [EFFECT2] on the [DIGITAL EFFECT] Sub-Menu to [OFF].



中文

放影數位重疊

該功能可以給畫面提供與數位重疊功能(→ 132)相同的視覺效果。

只有在啟動TBC功能時，才能使用放影數位重疊功能。請確認[TBC]指示已顯示。(→ 64)

將您的題名儲存在數位畫面記憶器中時

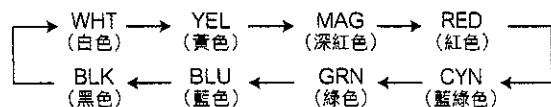
- 1 在放影中，當您到達想作為題名而重疊在另外的場景之上的場景處時，按住[STORE](儲存)鈕2秒鐘以上。

- 捕捉在數位畫面記憶器中的題名將持續顯示在屏幕之上。

選擇需要的題名色彩時

- 2 在題名顯示中，重複按[COLOUR](色彩)鈕，直至出現需要的色彩為止。

- 題名色彩將如下改變：



取消放影數位重疊功能時

按[OFF/ON]鈕，使題名消失。

- 當使用微電腦連接套件，將攝錄影機的數位靜畫端子連接至微電腦時(→ 162)，將無法在圖像中插入您獨自的題名。

ENGLISH

Playback Digital Superimposer

This function gives the pictures the same visual effect as the Digital Superimposer Function (→ 132).

The Playback Digital Superimposer Function can be used only when the TBC Function is activated. Make sure that the [TBC] Indication is displayed. (→ 64)

Storing Your Own Title in the Digital Image Memory

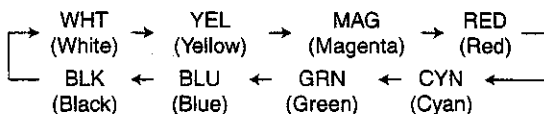
- 1 During playback, press the [STORE] Button for more than two seconds when you reach the scene that you want to superimpose as a title in another scene.

- The title captured in the digital image memory remains on the screen.

Selecting the Desired Colour for the Title

- 2 While the title is displayed, press the [COLOUR] Button repeatedly until the desired colour appears.

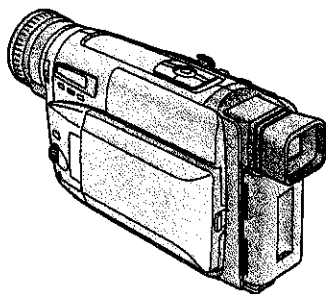
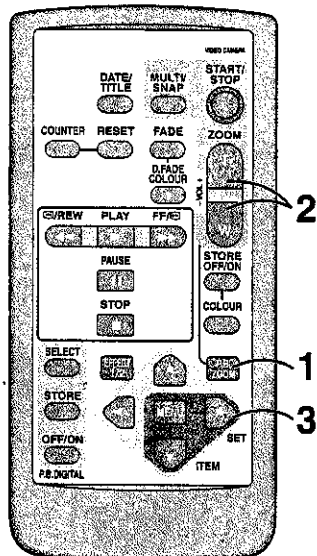
- The colours for the title change in the following order:



Cancelling the Playback Digital Superimposer Function

Press the [OFF/ON] Button to make the title disappear.

- When the Movie Camera's Digital Still Picture Terminal is connected to a computer by using the Personal Computer Connection Kit (→ 162), inserting your own titles in the picture is not possible.



中文

放大正在播放的畫面 (放影變焦)

使用本功能，在放影過程中您可以將畫面的一部分放大至10倍。

- 1 在放影中，按遙控器上的放影變焦鈕[P.B. ZOOM]。
 - 畫面的中心部分將放大約2倍。

改變變焦倍率

- 2 按遙控器上的[W]或[T]變焦鈕，改變倍率。
 - 您可以將倍率增加至10×。

改變被放大的部分畫面位置

- 3 根據您打算移動畫面之放大部分的方向，按遙控器上的箭頭鈕(▲, ◀, ▶, ▼)。

取消放影變焦功能時

按遙控器上的[P.B. ZOOM]鈕。

- 在放影變焦狀態下，將無法調節音量。
- 關閉攝錄影機或將其從放影機狀態切換至攝錄影機狀態時，會自動取消放影變焦狀態。
- 畫面放得越大，畫面的畫質越差。
- 不能同時使用任何數位效果和放影變焦功能。(→ 138)

ENGLISH

Enlarging the Playback Picture (Playback Zoom)

With this function, you can enlarge a part of the picture by up to 10 times during playback.

- 1 During playback, press the Playback Zoom Button [P.B. ZOOM] on the Remote Controller.
 - The centre part of the picture is enlarged about 2 times.

Changing the Zoom Magnification

- 2 Press the [W] or [T] Zoom Button on the Remote Controller to change the magnification.
 - You can increase the magnification up to 10×.

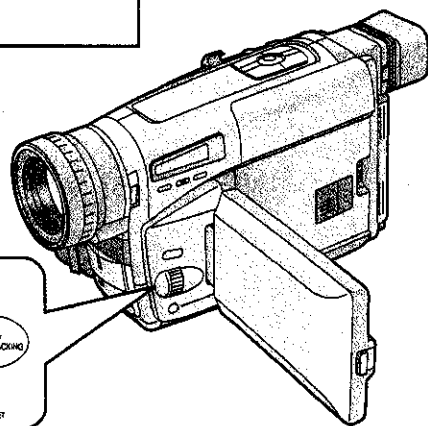
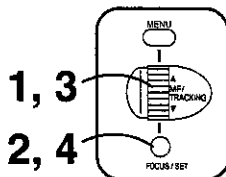
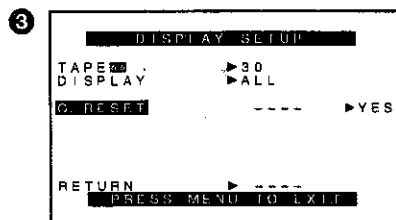
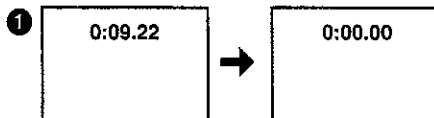
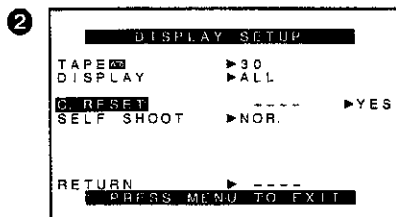
Shifting the Enlarged Part of the Picture

- 3 Press the Arrow Button (▲, ◀, ▶, ▼) on the Remote Controller according to the direction in which you want to shift the enlarged part of the picture.

Cancelling the Playback Zoom Function

Press the [P.B. ZOOM] Button on the Remote Controller.

- In the Playback Zoom Mode, it is not possible to adjust the sound volume.
- Turning the Movie Camera off or switching it from the VCR Mode over to the Camera Mode automatically cancels the Playback Zoom Mode.
- The more the picture is enlarged, the more its picture quality deteriorates.
- It is not possible to use any of the Digital Effects and the Playback Zoom Function at the same time. (→ 138)



中文

使用磁帶計時器指示時

磁帶計時器便於下列兩個目的：檢查用過的磁帶時間(下述)和使用記憶停止功能(→ 158)。

檢查用過的磁帶時間時

在拍攝或放影時，磁帶計時器將顯示已經過的磁帶時間。您可以隨時將指示復位(使計時器回到[0:00.00] **1**)。這樣，在開始拍攝或播放時將計時器復位後，您就可以檢查從復位點開始已經過的磁帶時間。

在顯示出[DISPLAY SETUP](屏幕顯示設定)子菜單後... (→ 28)

1 轉動[▲▼]環，選擇[DISPLAY](計時器顯示)。

2 按[SET](設定)鈕，選擇[ALL](全部)。

3 轉動[▲▼]環，選擇[C.RESET](計時器復原)。

4 按[SET]鈕，選擇[YES](是)。

- 開始拍攝或放影時，將以小時、分鐘和秒鐘來表示用過的磁帶時間。在播放沒有錄影的部分時，該指示不會改變。
- 當您倒帶超過磁帶計時器位置[0:00.00]時，磁帶計時器指示的前面會出現負號[-]。
- 當您取出錄影帶，取出電池或使用高速倒帶功能時，磁帶計時器指示將自動復位至[0:00.00]。

2：攝錄影機狀態

3：放影機狀態

ENGLISH

Using the Tape Counter Indication

The Tape Counter Indication is convenient for the following 2 purposes: to check the Elapsed Tape Time (described below), and to use the Memory Stop Function (→ 158).

Checking the Elapsed Tape Time

The Tape Counter Indication shows the elapsed tape time both during recording or playback.

You can freely reset this indication (return the counter to [0:00.00] **1**). Therefore, by resetting the counter to zero when you start recording or playback, you can check the tape time that has elapsed from that point.

After displaying the [DISPLAY SETUP] Sub-Menu... (→ 28)

1 Turn the [▲▼] Dial to select [DISPLAY].

2 Press the [SET] Button to select [ALL].

3 Turn the [▲▼] Dial to select [C.RESET].

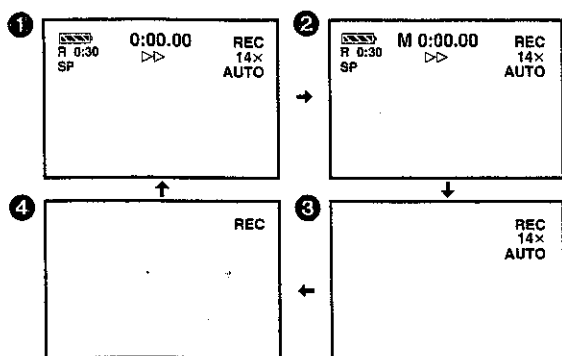
4 Press the [SET] Button to select [YES].

- When recording or playback starts, the elapsed tape time is indicated in hours, minutes and seconds. During playback of parts of the tape on which no recording has been made, this indication does not change.
- If you rewind the tape further than the tape counter position [0:00.00], the minus sign [-] appears in front of the Tape Counter Indication.
- The Tape Counter Indication is automatically reset to [0:00.00] when you take out the cassette, remove the Battery or use the High-Speed Rewinding Function.

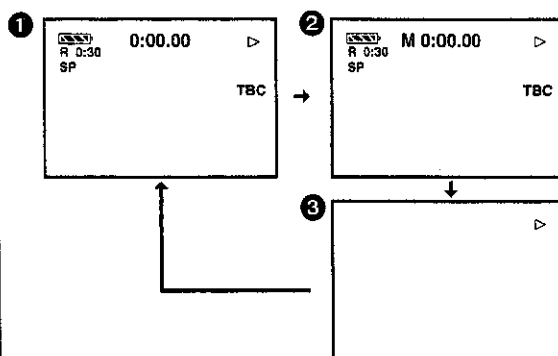
2: Camera Mode

3: VCR Mode

(A)



(B)



中文

■ 磁帶計時器指示的改變

通過改變[VCR FUNCTIONS](录像功能)主菜單或[CAMERA FUNCTIONS](攝像功能)主菜單上[DISPLAY SETUP](屏幕顯示設定)子菜單中的[DISPLAY](計時器顯示狀態)的設置，可以依上圖 ①-④ 所示改變計時器顯示狀態。

攝錄影機狀態 (A)

- ① ALL： 用過的磁帶時間指示 (初始設定)
- ② MEMORY： 記憶停止指示和用過的磁帶時間指示 (→ 158)
- ③ PARTIAL： 無計時器指示
僅會顯示幾個指示，以便能夠清晰地看見畫面的所有部分。然而，當您打開攝錄影機時，所有的指示起初會出現幾秒鐘，以告訴您所選擇的設定內容。
 - 這時，如果您將攝錄影機切換至放影機狀態，然後再切換回攝錄影機狀態，磁帶計時器指示將被自動選擇為[ALL]。
- ④ OFF： 無計時器指示
在此狀態下，僅會出現操作狀態指示和警告/報警指示。然而，當打開攝錄影機時，所有的指示會出現幾秒鐘，以告訴您選擇了甚麼設定。

放影機狀態 (B)

- ① ALL： 用過的磁帶時間指示 (初始設定)
- ② MEMORY： 記憶停止指示和用過的磁帶時間指示 (→ 158)
- ③ OFF： 無計時器指示
在此狀態下，僅會出現操作狀態指示和警告/報警指示。

ENGLISH

■ Changing the Tape Counter Indication

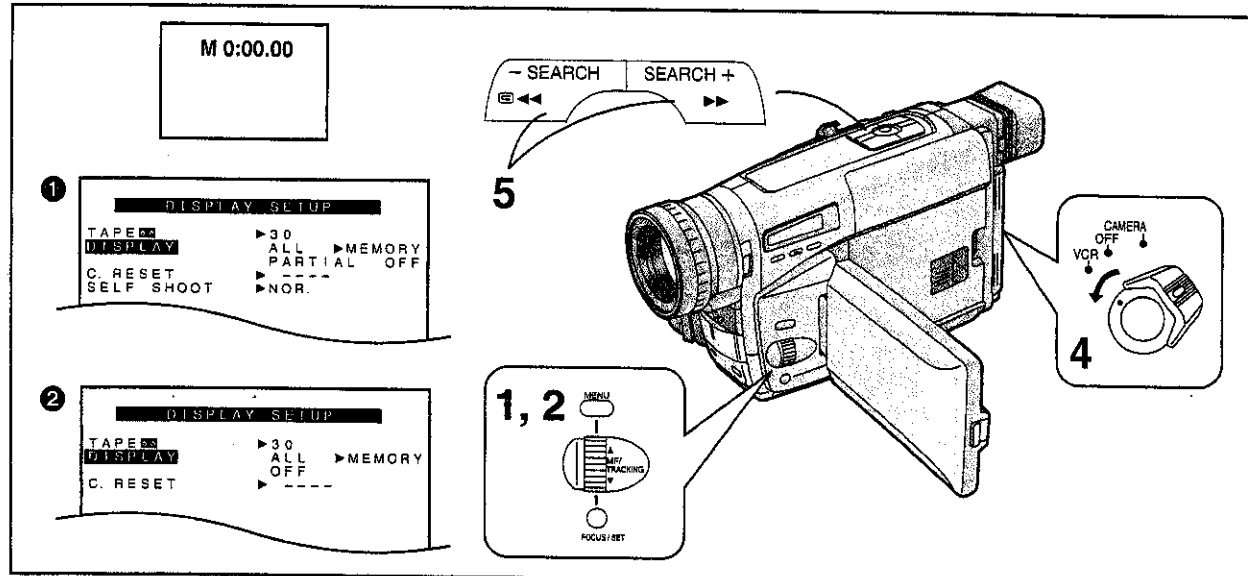
By changing the setting for [DISPLAY] on the [DISPLAY SETUP] Sub-Menu of the [VCR FUNCTIONS] or the [CAMERA FUNCTIONS] Main-Menu, the Counter Display Mode can be changed in the order shown in the above illustrations ①-④.

Camera Mode (A)

- ① ALL: Elapsed Tape Time Indication (initial setting)
- ② MEMORY: Memory Stop Indication and Elapsed Tape Time Indication (→ 158)
- ③ PARTIAL: No Counter Indication
Only a few indications are displayed so that all parts of the picture can be seen clearly. However, when you turn on the Movie Camera, all indications initially appear for a few seconds to inform you of the selected settings.
 - In this condition, if you switch the Movie Camera over to the VCR Mode and then back to the Camera Mode, [ALL] is automatically selected for the Tape Counter Indication.
- ④ OFF: No Counter Indication
In this mode, only the Operation Mode Indications and Warning/Alarm Indications can appear. However, when turning on the Movie Camera, all indications appear for a few seconds to inform you of the selected settings.

VCR Mode (B)

- ① ALL: Elapsed Tape Time Indication (initial setting)
- ② MEMORY: Memory Stop Indication and Elapsed Tape Time Indication (→ 158)
- ③ OFF: No Counter Indication
In this mode, only the Operation Mode Indications and Warning/Alarm Indications can appear.



中文

使用記憶停止功能時

該功能便於在拍攝或放影中臨時給錄影帶位置作上標記，使您以後能夠再次簡單地尋找到該位置，以進行放影。

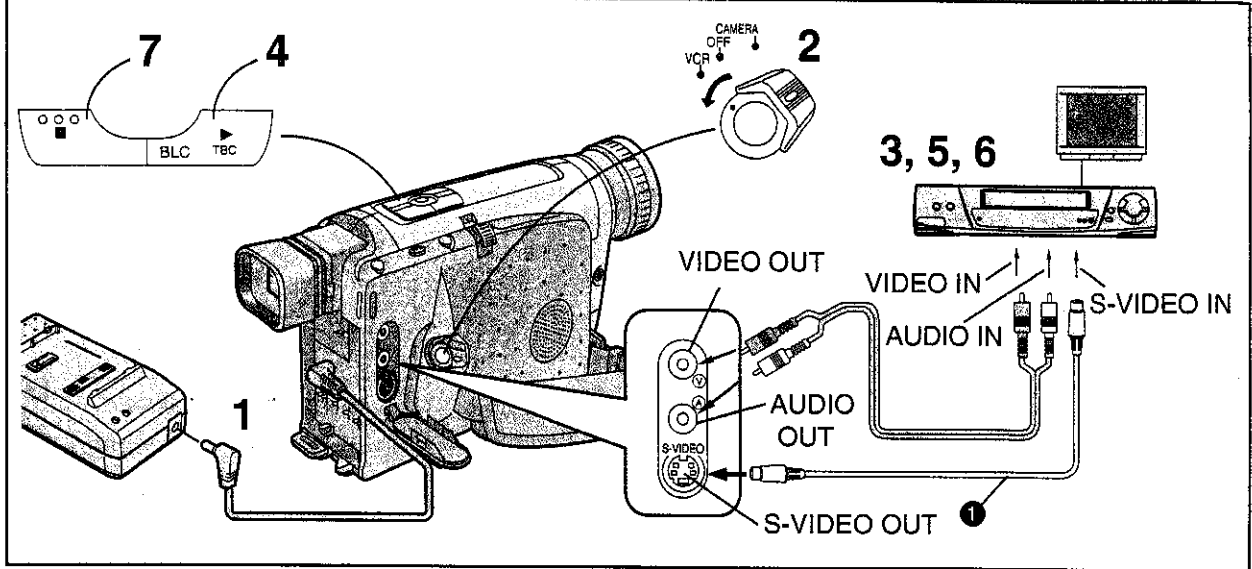
- 1 在您以後打算播放的磁帶位置，使磁帶計時器復原至零。(→ 116, 154)
- 2 將[CAMERA FUNCTIONS](攝像功能)主菜單①或[VCR FUNCTIONS](录像功能)主菜單②上[DISPLAY SETUP](屏幕显示設定)子菜單中的[DISPLAY](計時器顯示狀態)設置在[MEMORY](記憶)。
- 3 開始放影或拍攝。
- 4 在放影或拍攝結束後：
將[CAMERA/OFF/VCR]開關設置在[VCR]。
- 5 按[▶▶]或[◀◀]鈕。
 - 在您將計時器復原至零的大致位置，錄影帶會自動停止。
 - 在高速倒帶中，磁帶計時器將顯示[0:00.00]。但是，此時將不啟動記憶停止功能。

ENGLISH

Using the Memory Stop Function

This function is convenient for temporarily marking a tape position during recording or playback so that you can easily find it again later for playback.

- 1 Reset the Tape Counter to zero at the tape position from which you want to play back later. (→ 116, 154)
- 2 Set [DISPLAY] on the [DISPLAY SETUP] Sub-Menu of the [CAMERA FUNCTIONS] ① or the [VCR FUNCTIONS] Main-Menu ② to [MEMORY].
- 3 Start playback or recording.
- 4 After playback or recording is finished:
Set the [CAMERA/OFF/VCR] Switch to [VCR].
- 5 Press the [▶▶] or [◀◀] Button.
 - The tape automatically stops approximately at the position at which you reset the counter to zero.
 - During High-Speed Rewinding, the Tape Counter shows [0:00.00]. However, this does not activate the Memory Stop Function.



中文

拷貝 (複製)

連接音頻/影像纜線 (附件) 時，可以用該攝錄影機，將已錄的錄影帶複製在 VCR (錄影機) 上。

- 1 連接交流轉接器。
- 2 將已拍攝錄影帶裝入攝，使其處於放影機狀態。
- 3 將未錄錄影帶裝入 VCR，使其處於拍攝暫停狀態。
- 4 開始攝錄影機的放影。
- 5 開始 VCR 的錄影。
- 6 在到達原來拍攝的結尾時：
停止 VCR 的錄影。
- 7 停止攝錄影機的放影。

- 由於拷貝錄影帶的畫面質量略有降低，所以建議您選擇標準速度 (SP 狀態) 進行拷貝。
(SP 意思為標準放影。)
- 如果您的 VCR 具備編輯開關，請將其啟動。這樣，使可確保拷貝錄影帶的最佳畫面質量。
- 如果您的 VCR 具備 S 影像插孔時，也可連接 S 影像纜線 ① (附件)。

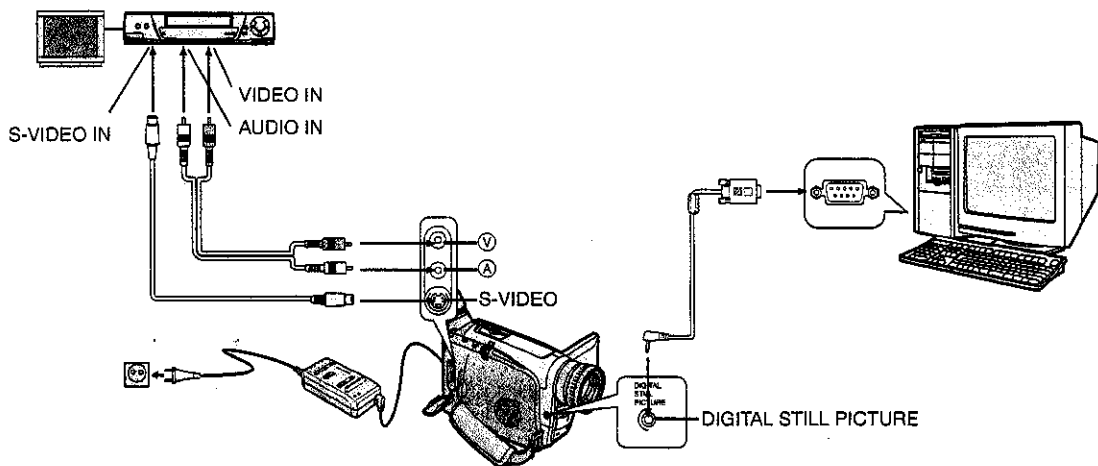
ENGLISH

Dubbing (Copying)

By connecting the AV Cable (supplied), you can copy the cassette recorded with this Movie Camera onto a VCR.

- 1 Connect the AC Adaptor.
- 2 Insert the recorded cassette into the Movie Camera and put it in the VCR Mode.
- 3 Insert an unrecorded cassette into the VCR and put it in the Recording Pause Mode.
- 4 Start playback on the Movie Camera.
- 5 Start recording on the VCR.
- 6 After reaching the end of the original recording:
Stop recording on the VCR.
- 7 Stop playback on the Movie Camera.

- As the picture quality on the dubbed cassette is slightly reduced, we recommend that you select the standard speed (SP Mode) on the VCR for dubbing.
(SP means Standard Play.)
- If your VCR is equipped with an Edit Switch, turn it on to ensure optimum picture quality of the dubbed cassette.
- If your VCR is equipped with an S-Video socket, also connect the S-Video Cable ① (supplied).



中文

攝錄影機與微電腦的配合使用

附帶的微電腦連接套件可以將攝錄影機連接至電腦，並可將靜止圖像傳送至電腦。

微電腦系統要求

DV STUDIO2 (數位影像演播室2) 可被裝入能夠運行 Microsoft® Windows® 95/98 的 PC/AT 微電腦中。(已經確認可以在 Windows® Me 上正確地運行)

對應機器：

具備 80486DX4 或更好的中央處理器的微電腦 (推薦使用 Pentium™ 或更好的中央處理器)

圖形卡：

建議採用真彩色 (約 16.7 百萬色) (即使用 256 色也能進行操作)

安裝內存：16MB 或以上 (推薦 32MB 或以上)

空餘硬盤容量：至少 16MB

磁盤驅動器：CD-ROM 驅動器

接口：RS-232C (D-sub 9 針)

其它設備：鼠標器

- Windows 是美國微軟公司的商標或註冊商標。
- 說明書中出現的所有其它公司和產品名稱均為相應公司的商標或註冊商標。
- 您打算從錄影帶裝入微電腦應用程序上的圖像，應該用 SP 狀態來拍攝。
- 有關操作環境、連接和操作的詳細說明，請參看微電腦連接套件的使用說明書。

ENGLISH

Using the Movie Camera with a Computer

The supplied Personal Computer Connection Kit makes it possible to connect the Movie Camera to a computer and transmit still video images to it.

Computer System Requirements

DV STUDIO2 can be installed in a PC/AT compatible personal computer which can run Microsoft® Windows® 95/98. (Already confirmed to operate correctly on Windows® Me)

Compatible machines:

Personal computer with 80486DX4 or higher CPU (Pentium™ or higher recommended)

Graphic card:

True Color (approx. 16.7 million colours) recommended (operation also possible even with 256 colours)

Installed memory: 16 MB or more

(32 MB or more recommended)

Free hard disk space: At least 16 MB

Disk drive: CD-ROM drive

Ports: RS-232C (D-sub 9 pin)

Other requirements: Mouse

- Windows is a trademark or registered trademark of Microsoft Corporation U.S.A.
- All other company and product names in the operating instructions are trademarks or registered trademarks of their respective corporations.
- Pictures that you intend to import from cassette into computer applications should be recorded in the SP Mode.
- For detailed explanations on the operating environment, connections and operations, refer to the Personal Computer Connection Kit's operating instructions.

注意事項

攝錄影機的注意事項

如果發生操作異常(例如:本機冒煙或發出異味),請立即停止使用本機,並與專業維修人員洽詢。

■ 為了防止火災、觸電和功能失常,請遵守下列各點:

- 勿拆卸攝錄影機或進行任何改裝。
- 勿使其濺水及觸及沙子。
- 請注意不要讓水(尤其是海水)或灰塵進入攝錄影機內。如果不慎讓海水濺到攝錄影機上,請將一塊軟布用清水浸濕並充分擰乾後,用其仔細擦拭攝錄影機機體。然後,再用一塊乾燥的軟布將機體整體徹底擦拭。
- 勿塞入任何異物。
- 使用中,勿用布蓋住。
- 勿使其受到強烈的振動或機械衝擊。
- 勿在有油煙或灰塵過多之處使用。
- 當雷電接近時,請停止使用攝錄影機。(如果正在使用交流轉接器,請將其從交流電源插座上拔下。)
- 勿在磁性設備附近使用。
- 勿靠近收音機或電視機使用。
- 勿在程控電話附近使用,否則,可能會導致雜訊而對畫面和聲音產生不利影響。
- 使用中,勿使磁帶盒朝下。
- 切勿將鏡頭或電子尋像器直接對準太陽。否則:鏡頭會聚集光線而發熱,從而損壞內部精密零件,並為攝錄影機造成無法挽回的損失。
- 勿將其置於夏天封閉的汽車內。內部高溫之高可能會超過您的想像,從而可能會損害攝錄影機。
- 勿用水清洗。水可能會滲入攝錄影機,並引起觸電或火災。
- 勿使用清潔劑、揮發劑、酒精、稀釋劑或其他化學藥品進行清潔。這些物質不僅會改變攝錄影機機殼的色彩或損壞表面,而且,如果附近有明火或加熱器時,還可能增加火災危險。
- 絕對勿將攝錄影機置於高溫之下。

■ 攝錄影機的存放注意事項

存放之前,請取出錄影帶和電池。

避免存放於下列場所:

- 高溫或高濕之處
推薦溫度: 15°C-25°C
推薦濕度: 40%-60%
- 暴露在直射陽光之處
- 直接與橡膠或塑料物品長期接觸之處
- 兒童可觸摸之處

交流轉接器的注意事項

■ 請遵守下列各點:

- 只能用於指定的攝錄影機和電池。
 - 勿用濕手進行處理。
- 拔掉交流電源纜線時,請握住插頭外拉,而不要拉扯電源纜線。
- 請勿過分彎折或改造電源線。
 - 不能過於靠近收音機、電視機等進行操作。

Precautions

Precautions for the Movie Camera

In the event of abnormal operation (e.g. if the unit emits smoke or an unusual smell), immediately stop operating the unit and consult qualified service personnel.

For Australia or New Zealand:

Consult the Panasonic Customer Care Centre on 132600.

■ To prevent fire, electric shock and malfunction, observe the following points:

- Do not disassemble the Movie Camera or make any alterations to it.
- Protect against spray water and sand.
- Take care that water splashes (especially seawater) or dust do not enter the Movie Camera. If seawater has accidentally splashed onto the Movie Camera, moisten a soft cloth with tap water, wring it out well and carefully wipe the camera body with it. Then thoroughly wipe it with a soft, dry cloth.
- Do not insert any foreign objects.
- Do not cover with a cloth during use.
- Do not subject to strong vibrations or mechanical shocks.
- Do not use in places with oily smoke and a lot of dust.
- If a thunderstorm approaches, stop using the Movie Camera. (If you are using the AC Adaptor, disconnect it from the AC mains socket taking care not to touch any metal parts.)
- Do not use near magnetized equipment.
- Do not use near a radio or TV.
- Do not use near a cell phone because doing so may cause noise to adversely affect the picture and sound.
- Do not use with the cassette compartment facing down.
- Do not aim the lens or Finder directly at the sun; the lens collects light and the resulting heat could deform internal precision parts and cause irreparable damage to the Movie Camera.
- Do not leave in a closed car on a summer day. The inside temperature becomes higher than you imagine and this could damage the Movie Camera.
- Do not wash with water. Water might leak into the Movie Camera and cause an electric shock or fire.
- Do not use a cleaning fluid, benzene, alcohol, thinner or other chemicals for cleaning. They might not only change the colour and damage the surface of the camera body, but might also increase the risk of fire if there is an open flame or heater nearby.
- Never leave the Movie Camera in places with high temperature.

■ Precautions for Storing the Movie Camera

Be sure to take out the cassette and remove the Battery before storing.

Avoid the following places:

- Places with high temperature and high relative humidity
Recommended temperature: 15°C-25°C
Recommended relative humidity: 40%-60%
- Places exposed to direct sunlight
- In direct contact with rubber or plastic products for a long time
- In reach of children

Precautions for the AC Adaptor

■ Observe the following points:

- Use only for the specified Movie Camera and Battery.
- Do not handle with wet hands.
To unplug the AC Mains Lead, be sure to pull it out by the plug, not by the cable.
- Do not forcefully bend the cables or alter them.
- Do not operate very close to a radio, TV, etc.

電池的注意事項

電池之所以能產生電能，是以化學反應為基礎的。如果對電池處理不當，則可能引起漏電、溫度過高，甚至發生火災或爆炸。

■ 請遵守下列各點：

- 給電池充電時，只能使用專用的交流轉接器或汽車電池充電器，且只能將該電池用於本攝錄影機。
- 攝錄影機使用結束後，請取出電池。
- 如果將電池留在攝錄影機內，即使將[CAMERA/OFF/VCR]開關設至[OFF]，也仍將消耗少量電力，且會減少電池的電量。如果將電池放在攝錄影機內時間過長，可能使其過度放電，則可能導致無法充電。
- 勿讓鑰匙、項鍊之類的金屬物體與電池端子相碰。否則會發生短路，並發熱，從而引起電池爆炸。當儲存或將電池放在背包中攜帶時，應特別小心。
- 勿使電池變形或改造電池。
- 即使正確地充電後，用於平常使用的操作時間也太短時，說明電池已經到達其使用壽命。
- 若電池過熱，保護功能會啟動，將使電池暫時停止操作。
- 勿將電池投入火中。否則可能會引起爆炸。

■ 電池的儲存注意事項

避免置於下列場所，否則將縮短電池的使用壽命：

- 置於特別高溫或高濕之處
推薦溫度：15°C–25°C
推薦濕度：40%–60%
- 置於油煙和灰塵過多之處
電池端子將生鏽。
- 如果長時間儲存電池時，請進行放影或其他操作，使電池的剩餘電量完全用光。然後將其從攝錄影機中取出，並存放起來。建議您約每年重新啟用一次電池，將其充電，然後在重新存放之前，將其用盡。

錄影帶的注意事項

當您結束使用攝錄影機時，請將錄影帶倒轉到頭，並將其從攝錄影機中取出。如果長時間存放錄影帶時，至少每年應將其快進然後倒帶一次，以使錄影帶接觸到新鮮空氣。

為了防止錄影帶盒變形和畫面和音質的降低，請遵守下列各點。

- 勿讓錄影帶遭受強烈振動或機械衝擊。
- 勿置於磁性設備附近。
- 避免溫度將可能昇得太高之處。

Precautions for the Battery

The Battery's ability to generate electric energy is based on a chemical reaction. If the Battery is incorrectly handled, it could cause leakage, excessive rise in temperature, fire or explosion.

■ Observe the Following Points:

- Use only the specified AC Adaptor or Car Battery Charger to charge the Battery, and use the Battery only for this Movie Camera.
- When you have finished using the Movie Camera, be sure to remove the Battery.
If you leave the Battery attached to the Movie Camera, a small amount of electricity is consumed even if the [CAMERA/OFF/VCR] Switch is set to [OFF], and this reduces the Battery's charge. Leaving the Battery attached to the Movie Camera for a very long time could discharge it excessively and this could make charging impossible.
- Do not allow metal objects such as keys and necklaces to touch the battery terminals.
Short-circuiting may occur and generate heat, and this could cause the Battery to explode. Be especially careful when storing or carrying the Battery in a bag.
- Do not deform or alter the Battery.
- When the operation time even after proper charging is too short for normal use, the service life of the Battery has reached its end.
- If the Battery becomes too warm, a protection function is activated and it puts the Battery temporarily out of operation.
- Do not throw the Battery into a fire.
This could cause it to explode.

■ Precautions for Storing the Battery

Avoid the following places, as they could shorten the service life of the Battery:

- Places with extremely high temperature and high relative humidity
Recommended temperature: 15°C–25°C
Recommended relative humidity: 40%–60%
- Places with oily smoke and a lot of dust
The terminals of the Battery might rust.
- Before you store the Battery for a long time, perform playback or other operations to completely use up the remaining charge in the Battery. Then remove it from the Movie Camera and store it. We recommend that you reactivate the Battery about once a year by charging it and then completely using up the charge before storing it again.

Precautions for the Cassette

When you have finished using the Movie Camera, rewind the tape to the beginning and take the cassette out of the Movie Camera. If you store the cassette for a long time, fast-forward and then rewind it at least once a year to expose the tape to fresh air.

Observe the following points to prevent deformation of the cassette case and deterioration of the picture and sound quality.

- Do not subject the cassette to strong vibration or mechanical shocks.
- Do not place it near magnetized equipment.
- Avoid places where the temperature can become very high.

凝結濕氣的原因和處理方法

當攝錄影機內部和錄影帶上已經凝結了濕氣時，不僅無法進行拍攝，而且，錄影帶還可能與磁頭保持接觸，從而導致攝錄影機損壞。

■ 凝結濕氣的主要原因

- 將攝錄影機突然從冷環境移到熱環境時。
- 將攝錄影機從有空調的汽車和房屋內，拿到室外時。
- 當在冷房間中打開加熱器時。
- 當攝錄影機擺在空調機的冷風之下時。
- 當攝錄影機處於有蒸氣、非常熱或很潮濕的地方時。

■ 凝結濕氣的症狀

當打開攝錄影機電源，凝結濕氣指示[U10/☒]會出現於電子尋像器中。（幾秒鐘後，攝錄影機將自動關閉電源。）

■ 處理方法如下：

1. 取出錄影帶。
2. 讓磁帶室打開，並等待幾小時。
3. 等幾個小時後，再打開攝錄影機並確認濕氣指示是否還顯示。
為了確保安全，請再等1小時左右。

■ 為了防止凝結濕氣

將攝錄影機從非常冷的環境帶到熱地方時，應該將攝錄影機放入密封的塑料包或類似物品內，保存1～2個小時後再加使用。

■ 當鏡頭上出現霧氣時

請打開攝錄影機，等待1小時左右，直到攝錄影機已經達到與環境相同的溫度為止。

影像磁頭髒污和處理方法

如果影像磁頭被灰塵弄髒時，畫質會降低。

■ 影像磁頭髒污的症狀

- 打開攝錄影機時，在頭幾秒鐘內，[U11/☒]指示會出現在尋像器中。
- 當在攝錄影機上放影，並在連接的電視機上觀看畫面時，畫面上出現白色雜波條紋。然而，如果磁頭特別髒時，則可能完全看不見畫面。

■ 處理方法如下：

請用影像磁頭清潔錄影帶，來清潔磁頭。

要小心地依說明書進行操作。否則，清潔過多可能會磨損磁頭。若清潔後，播放的畫面仍不清晰，這說明影像磁頭已經磨損。請諮詢專業維修人員。

Causes of Condensation and Remedy

When condensation has formed inside the Movie Camera and on the tape, recording becomes impossible. In addition, the tape might remain in contact with the heads and this could seriously damage the Movie Camera.

■ Main Causes of Condensation

- When the Movie Camera is brought from a cold to a warm place.
- When the Movie Camera is taken outdoors from inside an air-conditioned car or house.
- When the heating is turned on in a cold room.
- When the Movie Camera is exposed to the cold breeze from an air-conditioner.
- When the Movie Camera is in a very hot or humid place or in a place with steam.

■ Symptoms of Condensation

When turning on the Movie Camera, the Condensation Indication [U10/☒] appears.

(A few seconds later, the Movie Camera automatically turns itself off.)

■ Remedy as Follows:

1. Take out the cassette.
2. Keep the Cassette Compartment open and wait a few hours.
3. A few hours later, turn on the Movie Camera and confirm that the Condensation Indication is not displayed any more. For added safety, wait about 1 more hour.

■ To Prevent Condensation from Forming

When bringing the Movie Camera from a very cold to a warm place, keep it in a tightly closed plastic bag or something similar for 1 to 2 hours before using it again.

■ When the Lens is Fogged up

Turn the Movie Camera on and wait for about 1 hour until it has reached about the same temperature as its surroundings.

Video Head Clogging and Remedy

If the video heads become dirty and clogged with dust, the picture quality deteriorates.

■ Symptoms of Dirty Video Heads

- When turning on the Movie Camera, the [U11/☒] Indication appears for the first few seconds.
- When playing back a cassette on the Movie Camera and watching the picture on a connected TV, white noise bars appear in the picture. However, if the heads are extremely dirty, the playback picture cannot be seen at all.

■ Remedy as Follows:

Use a video head cleaning cassette to clean the heads. Carefully follow the instructions for its use as too much cleaning wears down the heads. If the playback picture is not clear after cleaning, it means that the video heads are worn out. Consult qualified service personnel.

白色平衡(色調)調節的工作原理

影像拍攝是在各種不同的光源下進行：從作為主要自然光源的陽光，至範圍廣泛的人工光源，如熒光燈等。由於這些都各有不同的色溫，因此會給目標物的色彩帶來微妙的色調差異。

人眼可以輕易地適應各種光源，甚至在不同的光線下，也能識別具有同樣色彩的目標物。

然而，攝錄影機的眼睛(鏡頭)還無法適應光線變化和照明影響。所以，根據光源不同，拍攝的畫面可能會偏藍或泛紅。為了使光線影響減至最低，需要進行所謂的白色平衡調節。

■ 自動白色平衡

該攝錄影機可提供自動白色平衡調節和手動白色平衡調節。當攝錄影機處於全自動狀態時，攝錄影機的內部系統會自動決定光源的溫度，並對目標物的色調進行相應的補償。白色是決定色調的基本色彩。由於此調節是以白色為基礎而進行的，所以被稱為白色平衡調節。幾種光源的最佳設定被儲存在攝錄影機的記憶中。內部微電腦會將來自攝錄影機前部的白色平衡傳感器接收的光源色溫，與記憶中儲存色彩進行比較，選擇用於最接近之色調的設定值。

請勿用手遮住白色平衡傳感器(→ 12)。

■ 手動白色平衡

儘管該攝錄影機在記憶中儲存了幾個光源的最佳設定值，可正確地判斷白色，但是卻無法應付所有的光源。所以，在無法用自動白色平衡調節進行正確調節的光源類型(→ 106, 108)下拍攝時，請使用手動白色平衡調節。(→ 106)

聚焦調節的工作原理

如果您用放大鏡觀看目標物，使其靠近或離開您的眼睛時，將會找到目標物清晰可見的一點。聚好焦或已聚焦意味着可以最清晰和鮮明地看見目標物。鏡頭與光線能聚焦在一點之間的距離，稱為焦距或聚焦長度，它取決於鏡頭的尺寸和形狀。

人眼也有鏡頭，當我們觀看距離不同的目標物時，這些鏡頭的形狀會自動改變，使我們總能看清這些目標物。

■ 自動聚焦調節

目標物的圖像通過鏡頭進入攝錄影機，然後被轉換為電子信號(影像信號)錄製在錄影帶上。以此信號為基礎，自動聚焦系統將自動前後移動聚焦鏡頭來調節焦距。

將聚焦調節電子尋像器中央部分的目標物。

How the White Balance (Tint) Adjustment Works

Video recording takes place under various light sources, from sunlight as the main natural light source to a wide range of artificial light sources such as fluorescent lamps. As each of these light sources has a different colour temperature, each of them gives the colours of the subject a slightly different tint. Human eyes can easily adjust to different kinds of lighting and recognize an object as having the same colour, even under different light sources.

The eye of the Movie Camera (lens), however, cannot adapt to the change in lighting and is influenced by the lighting. Therefore, depending on the light source, the picture would be recorded with a bluish or reddish tint. To minimize the influence of the lighting on the colours of the subject, an adjustment called White Balance Adjustment is necessary.

■ Auto White Balance

This Movie Camera offers both Auto White Balance Adjustment and Manual White Balance Adjustment. When the Movie Camera is in the Full Auto Mode, the internal system of the Movie Camera automatically determines the temperature of the light and compensates the tint of the subject accordingly. White is the basic colour by which the tint is determined. Because this adjustment is performed based on the white colour, it is called White Balance Adjustment. The optimum settings for several light sources are stored in the memory of the Movie Camera. The internal microcomputer compares the colour temperature of the light received by the White Balance Sensor positioned on the front of the Movie Camera with the colour stored in memory, and selects the setting for the most similar tint.

Be careful not to cover the White Balance Sensor (→ 12) with your hand, etc.

■ Manual White Balance

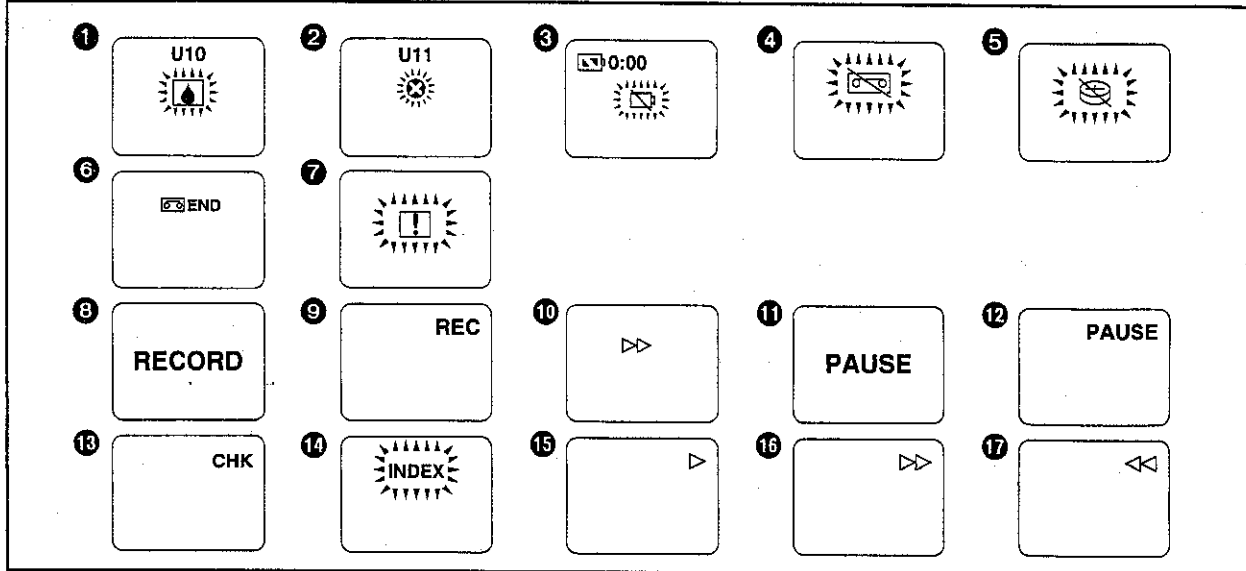
Although this Movie Camera stores the optimum settings for several light sources in memory to correctly judge the white colour, it cannot cope with all light sources. Therefore, to record under those types of lighting (→ 106, 108) which cannot be correctly adjusted with Auto White Balance Adjustment, use Manual White Balance Adjustment. (→ 106)

How the Focus Adjustment Works

If you look at an object through a magnifying glass and move it closer or further away from your eye, you will reach a point where the object becomes clearly visible. Being focused or in focus means that the subject can be seen with optimum clarity and sharpness. The distance between the lens and the point where the rays of light come together is called Focal Distance or Focal Length and depends on the size and shape of the lens. Human eyes have lenses too, and when we look at objects at different distances, the shape of these lenses changes automatically so that we can always see the objects clearly.

■ Auto Focus Adjustment

The image of the subject enters the Movie Camera through the lens and is converted into an electrical signal (video signal) for recording onto tape. Based on this signal, the Auto Focus System automatically adjusts the focal distance by moving the focusing lens forward or backward. The focus is adjusted on the subject in the centre of the Finder.



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尋像器指示

■ 警告/報警指示

- 1 凝結濕氣 (→ 168)
- 2 影像磁頭髒污 (→ 168)
- 3 剩餘電池電力
當電池電力耗盡時，攝錄影機將自動關機。請換上一個充足電的電池。
- 4 錄影帶 (→ 40)
未插入錄影帶。或插入錄影帶上的保險片被去掉。請插入保險片完好的錄影帶。
- 5 鈕扣式電池 (→ 48)
鈕扣式電池已耗盡或未插入。
- 6 錄影帶盡頭
當錄影帶走到盡頭時，會出現該指示。請插入新的錄影帶。
- 7 一般警告/報警指示
如果您在液晶顯示監視器朝前方時，使用鏡面狀態 (→ 126) 進行拍攝，將出現此指示，已取代實際的警告/報警指示。

■ 拍攝和放影指示

- 8 拍攝狀態 (大的指示) (→ 54)
- 9 拍攝狀態 (小的指示) (→ 54)
- 10 錄影帶運行狀態 (→ 54)
- 11 拍攝暫停狀態 (大的指示) (→ 54)
- 12 拍攝暫停狀態 (小的指示) (→ 54)
- 13 拍攝檢查狀態 (→ 58)
- 14 索引信號拍攝狀態
下列情況下，本機會自動拍攝索引信號 (在拍攝中，[INDEX] 指示會短暫閃爍)：
 - 在連接交流轉接器或裝上電池後開始拍攝時。
 - 插入錄影帶後開始拍攝時。
 - 從放影機轉變為攝錄影機狀態，然後開始拍攝時。
 由於拍攝了索引信號，在具備 VHS 索引尋影或放頭掃描功能的 VCR (錄影機) 上放影，便可利用這些功能。
 (請參看 VCR 的使用說明書。)
- 15 放影狀態 (→ 62)
攝錄影機尋影狀態 (→ 58)
- 16 快進/快進尋影放影狀態 (→ 70)
- 17 倒帶/倒帶尋影放影狀態 (→ 70)
攝錄影機尋影狀態 (→ 58)

ENGLISH

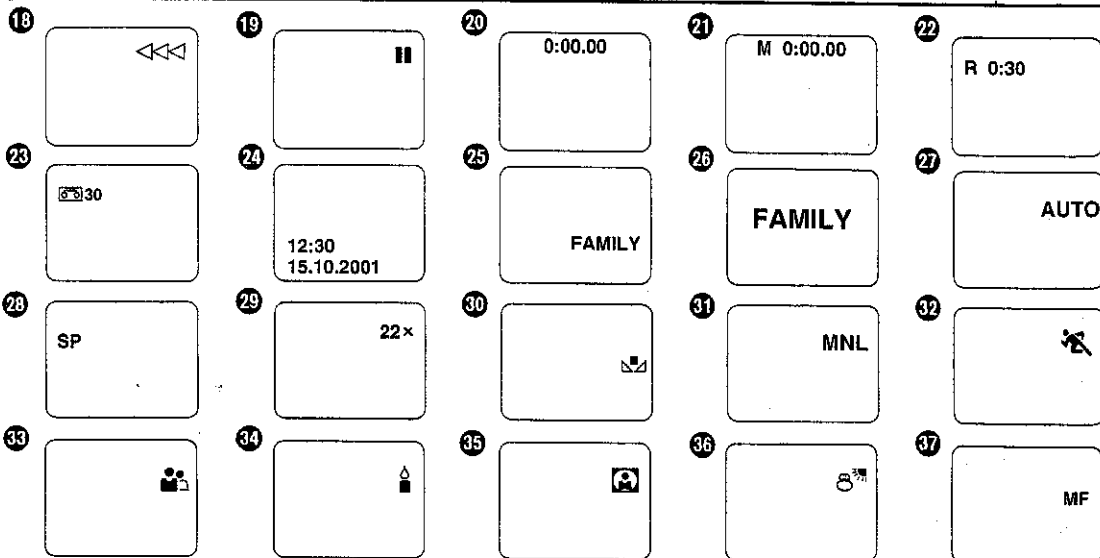
Indications

■ Warning/Alarm Indications

- 1 Condensation (→ 168)
- 2 Video Head Clogging (→ 168)
- 3 Remaining Battery Power
When the remaining battery power is used up, the Movie Camera automatically switches off. Replace the Battery with a fully charged one.
- 4 Cassette (→ 40)
No cassette is inserted. Or the tab of the inserted cassette is broken out. Insert a cassette with an intact tab.
- 5 Button-type Battery (→ 48)
The button-type battery is exhausted or is not inserted.
- 6 End of the Tape
When the tape has reached its end, this indication appears. Insert a new cassette.
- 7 General Warning/Alarm Indication
If you record with the LCD Monitor facing forward using the Mirror Mode (→ 126), this indication appears instead of the actual Warning/Alarm Indication.

■ Recording and Playback Indications

- 8 Recording Mode (large indication) (→ 54)
- 9 Recording Mode (small indication) (→ 54)
- 10 Tape Movement during Recording (→ 54)
- 11 Recording Pause Mode (large indication) (→ 54)
- 12 Recording Pause Mode (small indication) (→ 54)
- 13 Recording Check Mode (→ 58)
- 14 Index Signal Recording Mode
An index signal is automatically recorded (and the [INDEX] Indication flashes briefly while it is being recorded) when you:
 - Start recording after connecting the AC Adaptor or attaching the Battery.
 - Start recording after inserting a cassette.
 - Start recording after changing from the VCR to the Camera Mode.
 The recording of index signals makes it possible to use the VHS Index Search or Intro Scan Function during playback on a VCR equipped with these functions.
 (Refer to the operating instructions of your VCR.)
- 15 Playback Mode (→ 62)
Camera Search Mode (→ 58)
- 16 Fast Forward/Cue Playback Mode (→ 70)
- 17 Rewind/Review Playback Mode (→ 70)
Camera Search Mode (→ 58)

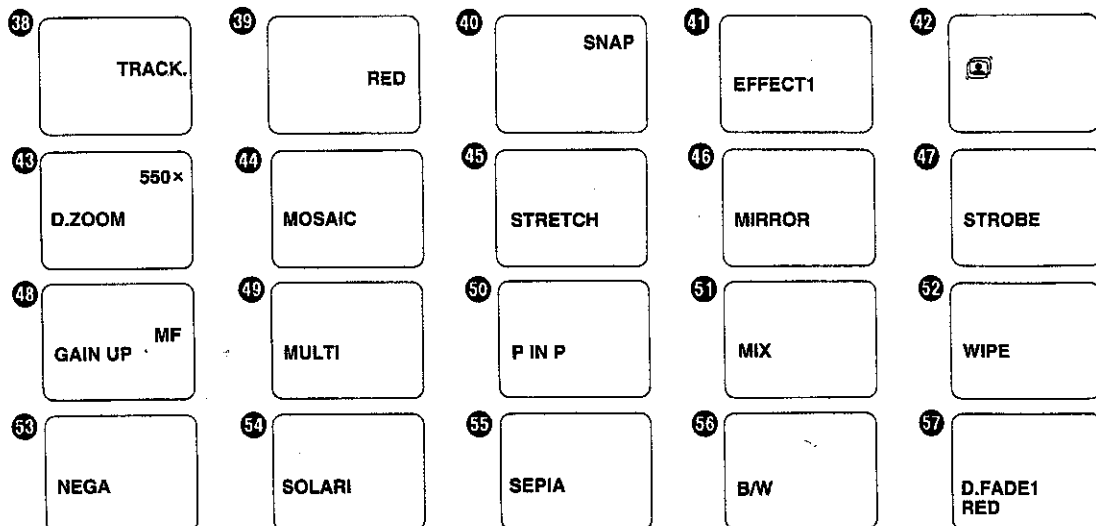


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- 18 高速倒帶狀態 (→ 68)
- 19 靜止放影狀態 (→ 70)
- 20 磁帶計時器用過的磁帶時間 (→ 154)
當錄影帶倒轉超過位置[0:00.00]時，用過的磁帶時間指示的前面會出現負號[-]。
- 21 啟動了記憶停止功能的磁帶計時器 (→ 158)
- 22 磁帶剩餘時間 (→ 42)
- 23 磁帶長度 (→ 42)
- 24 日期和時間 (→ 52)
- 25 題名 (小的指示) (→ 130)
- 26 題名 (大的指示) (→ 130)
- 27 全自動狀態 (→ 54)
- 28 錄影速度狀態 (→ 34)
- 29 變焦放大率 (→ 60)
- 30 手動白色平衡狀態 (→ 106)
- 31 手動拍攝狀態 (→ 106, 110)
- 32 運動狀態 (→ 112)
- 33 素描特寫狀態 (→ 112)
- 34 弱光狀態 (→ 112)
- 35 聚光燈狀態 (→ 112)
- 36 碎浪和雪地狀態 (→ 112)
- 37 手動聚焦狀態 (→ 110)

- 18 High-Speed Rewinding Mode (→ 68)
- 19 Still Playback Mode (→ 70)
- 20 Elapsed Tape Time (→ 154)
When the tape is rewound further than the position [0:00.00], the minus sign [-] appears in front of the Elapsed Tape Time Indication.
- 21 Elapsed Tape Time with activated Memory Stop Function (→ 158)
- 22 Remaining Tape Time (→ 42)
- 23 Tape Length (→ 42)
- 24 Date and Time (→ 52)
- 25 Title (small indication) (→ 130)
- 26 Title (large indication) (→ 130)
- 27 Full Auto Mode (→ 54)
- 28 Recording Speed Mode (→ 34)
- 29 Zoom Magnification (→ 60)
- 30 Manual White Balance Mode (→ 106)
- 31 Manual Recording Mode (→ 106, 110)
- 32 Sports Mode (→ 112)
- 33 Portrait Mode (→ 112)
- 34 Low Light Mode (→ 112)
- 35 Spotlight Mode (→ 112)
- 36 Surf & Snow Mode (→ 112)
- 37 Manual Focus Mode (→ 110)

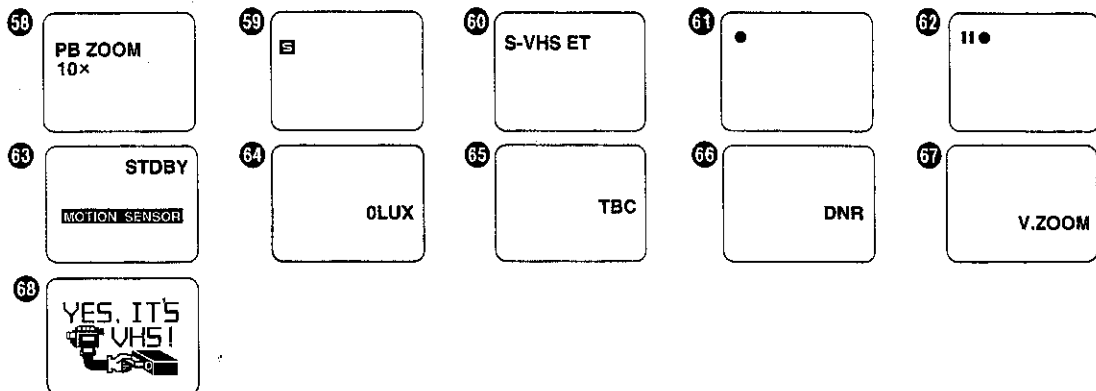


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- 38 磁跡調節狀態 (→ 68)
- 39 數位圖像用色彩指示 (→ 132, 150)
- 40 抓拍錄影狀態 (→ 76)
- 41 放影數位效果狀態 (→ 138)
- 42 超級畫面穩定狀態 (→ 86)
- 43 數位變焦狀態 (→ 88)
- 44 馬賽克狀態 (→ 80, 138)
- 45 加寬狀態 (→ 80, 138)
- 46 鏡面狀態 (→ 80, 138)
- 47 頻閃狀態 (→ 80, 138)
- 48 超高靈敏度狀態 (→ 80)
- 49 多畫面狀態 (→ 90, 92, 140, 142)
- 50 畫中畫狀態 (→ 94, 144)
- 51 混合狀態 (→ 96, 146)
- 52 划變狀態 (→ 96, 146)
- 53 負片狀態 (→ 84, 138)
- 54 曝光過久狀態 (→ 84, 138)
- 55 棕色狀態 (→ 84, 138)
- 56 黑白狀態 (→ 84, 138)
- 57 數位淡化狀態 (→ 98, 148)

ENGLISH

- 38 Tracking Adjustment Mode (→ 68)
- 39 Colour Indication for Digital Image (→ 132, 150)
- 40 Snapshot Recording Mode (→ 76)
- 41 Playback Digital Effect Mode (→ 138)
- 42 Super Image Stabilizer Mode (→ 86)
- 43 Digital Zoom Mode (→ 88)
- 44 Mosaic Mode (→ 80, 138)
- 45 Stretch Mode (→ 80, 138)
- 46 Mirror Mode (→ 80, 138)
- 47 Strobe Mode (→ 80, 138)
- 48 Gain up Mode (→ 80)
- 49 Multi Image Mode (→ 90, 92, 140, 142)
- 50 Picture-in-Picture Mode (→ 94, 144)
- 51 Mix Mode (→ 96, 146)
- 52 Wipe Mode (→ 96, 146)
- 53 Negative Mode (→ 84, 138)
- 54 Solarisation Mode (→ 84, 138)
- 55 Sepia Mode (→ 84, 138)
- 56 Black & White Mode (→ 84, 138)
- 57 Digital Fade Mode (→ 98, 148)



中文

58 放影變焦狀態 (→ 152)

59 S-VHS 狀態 (→ 44)

60 S-VHS ET 狀態 (→ 44)

61 拍攝狀態 (→ 126)

62 拍攝暫停狀態 (→ 126)

● 只有在鏡面狀態下拍攝時，才會出現上述 61 和 62 的指示。
(→ 126)

63 移動感應器控制拍攝功能待命狀態 (→ 100)

64 0 Lux 夜景狀態 (→ 104)

65 時基校正器 (→ 64)

66 數位噪聲削減狀態 (→ 64)

67 聲音變焦狀態 (→ 60)

68 示範狀態

示範狀態

在未插入錄影帶的時候打開攝錄影機，將其置於攝錄影機狀態，並在10分鐘內不進行任何操作時，它將自動切換至示範狀態，向您示範攝錄影機的豐富功能。

- 將[CAMERA FUNCTIONS](攝像功能)主菜單上的[OTHER FUNCTIONS](其他功能)子菜單中的[DEMO MODE](示範狀態)設置在[ON](開)，然後退出菜單，也能開始示範狀態。
- 按某一鈕或顯示菜單將暫時停止示範狀態。但是，如果您將攝錄影機保持在此狀態約10分鐘以上而不使用任何功能時，示範狀態將恢復。
- 如果您不希望啟動示範狀態，請將菜單上的[DEMO MODE]設置在[OFF](關)。
- 如果您在按住[▶]鈕的同時將[CAMERA/OFF/VCR](攝錄影機/關/錄影機)開關設置在[CAMERA](攝錄影機)，菜單中的[DEMO MODE]項將被自動設置在[ON]，並立即開始示範狀態。
- 如果您在按住[■]鈕的同時將[CAMERA/OFF/VCR]開關設置在[CAMERA]，[DEMO MODE]項將被自動設定為[OFF]。

ENGLISH

58 Playback Zoom Mode (→ 152)

59 S-VHS Mode (→ 44)

60 S-VHS ET Mode (→ 44)

61 Recording Mode (→ 126)

62 Recording Pause Mode (→ 126)

● The above indications 61 and 62 are only displayed when recording in the Mirror Mode. (→ 126)

63 Motion-Sensor-Controlled Recording Function Stand-by Mode (→ 100)

64 0 Lux Night View Mode (→ 104)

65 Time Base Corrector (→ 64)

66 Digital Noise Reduction Mode (→ 64)







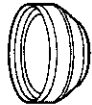
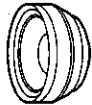



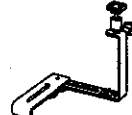

67 Voice Zoom Mode (→ 60)

68 Demonstration Mode

Demonstration Mode

When the Movie Camera is turned on and in the Camera Mode without any cassette inserted, and you leave it for 10 minutes without activating any function, it automatically switches over to the Demonstration Mode which demonstrates its many functions.

- You can also start the Demonstration Mode by setting [DEMO MODE] on the [OTHER FUNCTIONS] Sub-Menu of the [CAMERA FUNCTIONS] Main-Menu to [ON] and then exiting the menu.
- Pressing a button or displaying a menu temporarily suspends the Demonstration Mode. However, if you leave the Movie Camera in this condition without activating any function for more than approximately 10 minutes, the Demonstration Mode resumes.
- If you do not want the Demonstration Mode to be activated, set [DEMO MODE] on the menu to [OFF].
- If you set the [CAMERA/OFF/VCR] Switch to [CAMERA] while pressing the [▶] Button, [DEMO MODE] on the menu is automatically set to [ON] and the Demonstration Mode starts immediately.
- If you set the [CAMERA/OFF/VCR] Switch to [CAMERA] while pressing the [■] Button, [DEMO MODE] is automatically set to [OFF].

1. VW-AS7E/A 	2. CGR-V14S CGR-V610 	3. CGR-V26S CGR-V620 	4. CGR-V53S CGR-V816 	5. VW-KBC7E 	6. VW-LF43WE 
7. VW-LT4314WE 	8. VW-LW4307WE 	9. VZ-CT55E 	10. VW-TCA7E 	11. VZ-LDR10E 	12. VW-SK11E 
13. VW-DTA10E/A 					

中文

選購附件

- 交流轉接器
- 鋰離子電池組
- 鋰離子電池組
- 鋰離子電池組
- 汽車電池充電器
- 濾光鏡組件
- 望遠轉換鏡頭
- 廣角轉換鏡頭
- 標準三角架
- 磁帶轉接器
- IR/影像直流燈(鹵素遠紅外線燈)
(需座轉接器用以固定在攝錄影機上。)
- 座轉接器(用於安裝IR/影像直流燈)
- 微電腦連接套件

些附件在某些國家購買不到。

ENGLISH

Optional Accessories

- AC Adaptor
- Battery Pack (Lithium-Ion)
- Battery Pack (Lithium-Ion)
- Battery Pack (Lithium-Ion)
- Car Battery Charger
- Filter Kit
- Tele Conversion Lens
- Wide Conversion Lens
- Tripod
- Cassette Adaptor
- IR/Video DC Light (Halogen & Infra-red)
(It requires the Shoe Adaptor for attaching to the Movie Camera.)
- Shoe Adaptor (for attaching the IR/Video DC Light)
- Personal Computer Connection Kit

Some accessories are not available in some countries.

規格

S-VHS-C 攝錄影機

您的安全信息

電源： 直流7.2V(電池)
直流7.9V(交流轉接器)

耗電量
(電池操作時)：4.5W(使用電子尋像器時)
(NV-VS50)
6.0W(使用液晶顯示監視器時)
(NV-VS70)
6.2W(使用液晶顯示監視器時)

錄影帶規格： S-VHS-C/VHS-C 錄影帶

拍攝/放影時間： LP狀態下：2小時(使用EC60錄影帶時)

影像

電視制式： CCIR：625線，50幀PAL彩色信號

輸出電平： 影像輸出(PHONO)：
1.0Vp-p，75歐姆端接
S影像輸出：
Y(亮度信號)輸出：
1.0Vp-p，75歐姆端接
C(彩色信號)輸出：
300mVp-p，75歐姆端接

音頻

輸出電平/阻抗： 音頻輸出(PHONO)：
-6dBV(47千歐負載)/低於1千歐

音頻磁軌： 1軌跡(標準-單聲)

圖像感應器： 1/5英寸CCD圖像感應器

鏡頭： 22:1動力變焦鏡頭(光學兼容)
F1.6

聚光長度：2.9-63.8mm

數位人工智能自動聚焦/自動光圈

濾光鏡直徑：43mm

監視器： (NV-VS50) 2.5英寸彩色液晶顯示監視器
(NV-VS70) 3英寸彩色液晶顯示監視器

電子尋像器： 0.24英寸電子尋像器

標準亮度： 1,400 lux

操作溫度： 0°C-40°C

操作濕度： 10%-80%

重量： 約850克(電池除外)

尺寸： 約88(寬)×118(高)×231(深)mm

交流轉接器(NV-VS50)

您的安全信息

電源： 交流100-240V，50/60Hz

耗電量： 20W

直流輸出： 直流7.9V，8.5W(攝錄影機操作時)
直流8.4V，0.7A(電池充電時)

重量： 約180克(交流電源纜線除外)

尺寸： 約72(寬)×43(高)×143(深)mm

交流轉接器(NV-VS70)

您的安全信息

電源： 交流100-240V，50/60Hz

耗電量： 27W

直流輸出： 直流7.9V，8.5W(攝錄影機操作時)
直流8.4V，1.4A(電池充電時)

重量： 約235克(交流電源纜線除外)

尺寸： 約72(寬)×49(高)×143(深)mm

重量和尺寸為近似值。
若有變更，恕不另行通知。

Specifications

S-VHS-C Movie Camera

Information for your safety

Power Source: DC 7.2 V (Battery)
DC 7.9 V (AC Adaptor)

Power Consumption
(Battery Operation): 4.5 W (When using Finder)
(NV-VS50)
6.0 W (When using LCD Monitor)
(NV-VS70)
6.2 W (When using LCD Monitor)

Tape Format: S-VHS-C/VHS-C Cassette

Recording/Playback Time: LP; 2 hours with EC60

VIDEO

Television System: CCIR; 625 lines, 50 fields
PAL colour signal

Output Level: VIDEO OUT (PHONO);
1.0 Vp-p, 75 ohm terminated
S-VIDEO OUT;
Y Output: 1.0 Vp-p, 75 ohm terminated
C Output: 300 mVp-p, 75 ohm terminated

AUDIO

Output Level/Impedance: AUDIO OUT (PHONO);
-6 dBV (47 kohm loaded)/
less than 1 kohm

Audio Track: 1 track (Normal-Monaural)

Image Sensor: 1/5-inch CCD Image Sensor

Lens: 22:1 Power Zoom Lens
(Optical capability)
F1.6
Focal Length: 2.9-63.8 mm
Digital AI Auto Focus/Auto Iris
Filter Diameter: 43 mm
(NV-VS50) 2.5-inch Colour LCD Monitor
(NV-VS70) 3-inch Colour LCD Monitor
0.24-inch Electronic Finder
1,400 lx
Standard Illumination: 0°C-40°C
Operating Temperature: 10%-80%
Operating Humidity: Approx. 850 g (without Battery)
Weight: Approx. 88 (W)×118 (H)×231 (D) mm
Dimensions:

AC Adaptor (NV-VS50)

Information for your safety

Power Source: AC 100-240 V, 50/60 Hz

Power Consumption: 20 W

DC Output: DC 7.9 V, 8.5 W
(Movie Camera Operation)
DC 8.4 V, 0.7 A (Battery Charging)

Weight: Approx. 180 g (without AC Mains Lead)

Dimensions: Approx. 72 (W)×43 (H)×143 (D) mm

AC Adaptor (NV-VS70)

Information for your safety

Power Source: AC 100-240 V, 50/60 Hz

Power Consumption: 27 W

DC Output: DC 7.9 V, 8.5 W
(Movie Camera Operation)
DC 8.4 V, 1.4 A (Battery Charging)

Weight: Approx. 235 g (without AC Mains Lead)

Dimensions: Approx. 72 (W)×49 (H)×143 (D) mm

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

要求服務之前 (故障和解決辦法)

電源

- P1:** 攝錄影機電源不能打開。
- S1:** 是否已正確連接了電池或交流轉接器？請確認連接狀況。(→ 18, 20)
- P2:** 攝錄影機自動關閉。
- S2:** 如果您讓攝錄影機處於拍攝暫停狀態超過6分鐘，本機將自動關閉，以保護磁帶，並節省電池能源。從此狀態恢復拍攝時，請將[CAMERA/OFF/VCR](攝錄影機/關/錄影機)開關設置在[OFF](關)，然後重新將其設置在[CAMERA](攝錄影機)狀態。(→ 56)
- P3:** 攝錄影機很快關閉電源。
- S3-1:** 電池是否已耗盡？當剩餘電池操作時間指示顯示為“0:00”或[]指示閃爍時，說明電池已耗盡。請給電池充電或裝入充足電的電池。(→ 20)
- S3-2:** 是否已形成了凝結？如果將攝錄影機從冷地方帶到暖地方時，內部可能會發生凝結。在此情況下，攝錄影機會自動關閉，且除了取出磁帶以外，將無法進行其他操作。請等待，直至凝結指示消失為止(約2-3小時)。(→ 168)

錄影帶

- P1:** 剩餘磁帶時間指示不正確。
- S1:** 是否正確選擇了所插入錄影帶的長度？請選擇正確的錄影帶長度。(→ 42)
- P2:** 攝錄影機和錄影帶在機場要進行X光安全檢查，這對錄影帶有影響嗎？
- S2:** 這對攝錄影機和錄影帶沒有不良影響。
- P3:** 在播放一盤已存放一段時間的錄影帶時，影像出現扭曲。
- S3:** 這盤錄影帶被存放在了不恰當的地方(有灰塵，潮濕，高溫等處)，或者靠近強磁物體或設備。很不幸，沒有補救的方法。請務必正確存放錄影帶。(→ 166)

拍攝

- P1:** 電子尋像器中無圖像。
- S1:** 液晶顯示監視器處在打開的狀態(除非是在液晶顯示監視器朝向前方進行拍攝時)。
- 請確認並完全合上液晶顯示監視器。(→ 26)
- P2:** 液晶顯示監視器中的圖像不清晰。
- S2:** 未正確地調節圖像質量。
- 請調節圖像質量。(→ 38)

Before Requesting Service (Problems & Solutions)

Power Supply

- P1:** The Movie Camera does not turn on.
- S1:** Is the Battery or the AC Adaptor connected correctly? Confirm the connection. (→ 18, 20)
- P2:** The Movie Camera has turned off automatically.
- S2:** If you leave the Movie Camera in the Recording Pause Mode for more than 6 minutes, it automatically switches off to protect the tape and to conserve battery power. To resume recording from this condition, set the [CAMERA/OFF/VCR] Switch to [OFF] and then to [CAMERA] again. (→ 56)
- P3:** The Movie Camera quickly turns off.
- S3-1:** Is the Battery discharged? When the Remaining Battery Operation Time Indication shows "0:00" or the [] Indication is flashing, the Battery is discharged. Charge the Battery or attach a fully charged Battery. (→ 20)
- S3-2:** Has condensation formed? If the Movie Camera is brought from a cold to a warm place, condensation may form inside. In this case, the Movie Camera automatically switches off and no operations can be performed except taking out the cassette. Wait until the Condensation Indication disappears (approximately 2-3 hours). (→ 168)

Cassette

- P1:** The Remaining Tape Time Indication is not correct.
- S1:** Is the tape length of the inserted cassette correctly selected? Select the correct tape length. (→ 42)
- P2:** The Movie Camera and cassettes underwent security X-ray inspection at an airport. Does this affect the cassettes?
- S2:** No, this has no negative influence on the Movie Camera or the cassettes.
- P3:** When playing back a cassette that was stored for some time, the picture is distorted.
- S3:** The cassette was stored in an unsuitable place (dusty, humid, hot, etc.) or near strongly magnetized objects or equipment. Unfortunately, there is no remedy. Always store the cassettes correctly. (→ 166)

Recording

- P1:** No picture appears in the Finder.
- S1:** The LCD Monitor is open (Except when recording with the LCD Monitor facing forward). Securely close the LCD Monitor. (→ 26)
- P2:** Picture on the LCD Monitor is not clear.
- S2:** Picture quality is not properly adjusted. Adjust picture quality. (→ 38)

拍攝(續)

- P3: 當按拍攝開始/停止鈕時,不能開始拍攝。
- S3: 所插錄影帶的保險片已被拔去。請插入帶有保險片的錄影帶。或者,在保險片所在的孔上貼上兩層膠帶紙。
(→ 40)
- P4: 日期/時間/題名指示不顯示。
- S4-1: 這是因為對[DATE/TITLE](日期/題名)鈕和/或[MENU](菜單)鈕進行了誤操作。按[MENU]鈕並設定需要的日期/時間/題名指示,然後按[DATE/TITLE]鈕使日期/時間/題名指示顯示。(→ 52)
- S4-2: 鈕扣式電池已耗盡或未插入。更換一個新的鈕扣式電池。
(→ 48)

放影

- P1: 按[▶]鈕時,未出現播放的圖像。
- S1: [CAMERA/OFF/VCR](攝錄影機/關/錄影機)開關是否被設置在[VCR](錄影機)?當其被設置在[CAMERA](攝錄影機)時,將無法操作放影功能。(→ 62)
- P2: 播放圖像出現扭曲或有雜波條紋。
- S2-1: 錄影帶中的磁帶鬆了。
將其旋緊。(→ 40)
- S2-2: 磁頭髒污。請用選購的磁頭清潔帶清潔磁頭。(→ 168)
- S2-3: 沒有正確調整磁跡。正確調整磁跡。(→ 68)
- S2-4: 您正在放影一盤E55型錄影帶。由於使用此型號的錄影帶容易產生圖像的扭曲失真,我們建議您在拍攝時選用其它型號的錄影帶。(→ 54)
- P3: 播放圖像無彩色。
- S3: 沒有正確調節電視機的色彩。調節電視機的色彩控制。

遙控器

- P1: 遙控器不工作。
- S1-1: 遙控器內的鈕扣式電池已經耗盡。請將鈕扣式電池換新。
(→ 122)
- S1-2: 遙控器和/或攝錄影機被暴露在強光下。在使用遙控器時,請避免強光照射到遙控器和/或攝錄影機。

示範狀態

- P1: 攝錄影機總是處於示範狀態。
- S1: 示範狀態是用來解釋本攝錄影機的豐富功能的。希望關閉此狀態時,請將[CAMERA/OFF/VCR]開關設置在[OFF](關),然後在按住[■]鈕的同時重新將[CAMERA/OFF/VCR]開關設置在[CAMERA](攝錄影機)。或者,將[OTHER FUNCTIONS](其他功能)子菜單中的[DEMO MODE](示範狀態)項設定為[OFF]。(→ 178)

Recording (Continued)

- P3: Recording does not start when pressing the Recording Start/Stop Button.
- S3: The tab of the inserted cassette is broken out. Insert a cassette with intact tab. Or cover the hole where the tab was with two layers of adhesive tape. (→ 40)
- P4: The Date/Time/Title Indication is not displayed.
- S4-1: This is due to incorrect operation of the [DATE/TITLE] Button and/or the [MENU] Button. Press the [MENU] Button and set the desired Date/Time/Title Indication. Then press the [DATE/TITLE] Button so that the Date/Time/Title Indication appears. (→ 52)
- S4-2: The button-type battery is exhausted or is not inserted. Replace it with a new one. (→ 48)

Playback

- P1: No playback picture is reproduced when pressing the [▶] Button.
- S1: Is the [CAMERA/OFF/VCR] Switch set to [VCR]? When it is set to [CAMERA], no playback function can be operated. (→ 62)
- P2: The playback picture is distorted or contains noise bars.
- S2-1: The tape in the cassette is loose.
Tighten it. (→ 40)
- S2-2: The video heads are dirty. Clean them with an optional video head cleaning cassette. (→ 168)
- S2-3: The tracking is not adjusted correctly. Adjust the tracking correctly. (→ 68)
- S2-4: You are playing back an E55 type cassette. As picture distortion tends to occur with this type of cassette, we recommend that you use cassettes other than type E55 for recording. (→ 54)
- P3: The playback picture is not in colour.
- S3: The colour adjustment on the TV is not made properly. Adjust the colour control on the TV.

Remote Controller

- P1: The Remote Controller does not work.
- S1-1: The button-type battery in the Remote Controller is exhausted. Replace it with a new button-type battery. (→ 122)
- S1-2: The Remote Controller and/or the Movie Camera are exposed to strong light. Prevent strong light from falling on the Remote Controller and/or Movie Camera when using the Remote Controller.

Demonstration Mode

- P1: The Movie Camera remains in the Demonstration Mode.
- S1: The Demonstration Mode is designed for explaining the versatile functions of this Movie Camera. To switch the mode off, set [CAMERA/OFF/VCR] Switch to [OFF], then set it to [CAMERA] again while pressing the [■] Button. Or, set [DEMO MODE] on the [OTHER FUNCTIONS] Sub-Menu to [OFF]. (→ 178)